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

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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.

- 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

		i i andator	,			
S/ lo	Reference Number	NOS Title		Credi	Guide d	Remark
/Uıit				Value	LearnIng	
No					Hours	
1	AUT/ABW/001/L1	HEALTH, SAFETY AND ENVIRONMENT I)	2	20	Level 1
2						
	AUT/ABW/002/L1	COMMUNICATION		2	20	Level 1
3	,,,,	INTERPERSONAL SK	.	_		
		ND				
4		LLS I				
	AUT/ABW/003/L1	TEAM WORK I		2	20	Level 1
5						
	AUT/ABW/004/L1	INTRODUCTION TO	'EHICLE	4	40	Level 1
		LAYOUT AND WORK	SHOP			
		ORGANISATION				
	AUT/ABW/005/L1	INTRODUCTION TO	UTO	4	40	Level 1
		BODY WORKSHOP				
	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.

- 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)		Т		Evid ance Type		F	Evide Ref. F No.	
The learner will:		The learner can:						
LO 1:	1.1	Explain safe work practice						
Demonstrate Safe	1.2	Identify safety signs and symbols						
working Practices	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:	2.1	Identify work environment hazards						
Demonstrate	2.2	State methods to reduce the risk of						
Understanding of		these hazards.						
Safety, Hazards an	2.3	Identify Personal Protective						
Risks.		Equipment (PPE).						
	2.4	State methods to resolve an						
		occurring environmental hazard.						
LO 3:	3.1	Identify basic first aid equipment.						
Possess the ability	3.2	Demonstrate how to maintain						
to take appropriate		hygienic, safe and secure workplace.						
actions during	3.3	Mention the uses of safety						
accident/injury.		equipment in a workplace.						
	3.4	Demonstrate how to treat injury in a work place.						
		work place.		,				
LO 4:	4.1	Explain the importance of clean work						
Demonstrate safe		place environment.						
work habit and	4.2	Use safe access and exit routes in the						
clean work		work environment.						
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.

- 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			Evid nce Type		Evide Ref. I	
The learner will:		The learner can:						
LO 1: Demonstrate	1.1	Explain the importance of effective communication.						
knowledge of the	1.2	List ways to communicate effectively.						
importance of effective communication	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	2.1	Read and follow steps in an instruction manual pertaining to any of the units in this course.						
follow documented instructions	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.

- 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 able to:	De	PERFORMANCE CRITERIA The learner can:		Evid ance Type			ide f. P	
Understand positi working	e 1.1	Identify the need for developing positive working relationship with Colleagues.						
relationship with colleagues	1.2	with other people in a way that makes them feel valued and respected.						
	1.3	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.						
Take responsibilit	es 2.1	Mention own roles and responsibilities within the team.						
within the team	2.2	Perform tasks in line with the team rules and regulations.						
	2.3	Participate effectively in team work.						
Lo 3:	3.1	Work in line with organizational						
Comply with	3.1	standard.						
organization	3.2							
Policies.	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.

- 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

UNIT 04: Introduction	n to Ve	ehicle Layout and Workshop Organis	ation							
LEARNING		PERFORMANCE CRITERIA	Evid	enc	:e		E۱	iden	ce	
OUTCOME (LO)			Туре	•			Re	ef.		
						Page No.				
The learner will		The learner can:								
be able to:										
Lo 1: Understand the	1.1	Identify hand tools.								
use of workshop	1.2	Explain the use of hand tools.								
equipment and 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	2.1	List various vehicle components								
Vehicle components	2.2	Identify various vehicle components								
and composition	2.3	List materials which Vehicle								
		components are made of								
	2.4	Name the types of Chassis								
Lo 3: Understand	3.1	List the sections of an Automotive								
Automotive workshop		workshop								
organization		a) Mechanical								
		b) Electrical								
LEADNING		c) Body Work	F	<u> </u>	L		-			
LEARNING		PERFORMANCE CRITERIA	Evid		:е			iden •	ce	
OUTCOME (LO)			Туре				Re		1_	
The learner will		The learner can:					Pa	ige N	U.	
be able to:		The leather can.								
ne ante to:	2.2	Evaluin the activities of each of the								
	3.2	Explain the activities of each of the sections in 3.1 above								
	3.3					$\vdash \vdash$				
	3.3	Explain the uses of the spare pars store and records room								
		Store and records roull								

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.

- 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	lo Au	to body workshop PERFORMANCE CRITERIA	F	hiv	nce		F	vide	nce	
OBJECTIVE (LO)					Туре				Page	
The learner will		The learner can:								
be able to:										
LO1: Understand	1.1	Explain the activities in panel								
the different units		beating unit.								
in Auto body	1.2	Explain the activities in spray								
workshop		painting unit.								
	1.3	Explain the activities in upholstery unit.								
	1.4	Explain the activities in locksmithin ş unit.								
LO2: Know the	2.1	List the materials used in panel								
materials used in		beating work.								
Auto body	2.2	List the materials used in spray								
workshop	2.2	painting work.								
	2.3	List the materials used in Upholste y work.								
	2.4	List the materials used in								
		locksmithing work.								
LO3: Know the tools used in Auto body	3.1	List the tools used in panel beating work.								
works.	3.2	List the materials used in spray painting work.								
	3.3	List the materials used in upholster <i>y</i> work.								
	3.4	List the materials used in locksmithing work.								
		tooksiiitiiiig work.								
LO4: Know the	4.1	List the equipment used in panel								
equipment used in		beating work.								
Auto body	4.2	List the equipment used in spray								
workshop		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.*

- 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	Reference Number	NOS Title	Credi	Guide d	Remark
/Unit			Value	Learn ing	
No				Hours	
1	AUT/ABW/001/L2	HEALTH, SAFETY A ID	2	20	Level 2
		ENVIRONMENT II			
2	AUT/ABW/002/L2	COMMUNICATION AND	2	20	Level 2
		INTERPERSONAL S (ILLS II			
3	AUT/ABW/003/L2	TEAM WORK II	2	20	Level 2
4	AUT/ABW/004/L2	APPLICATION OF T OOLS,	6	60	Level 2
		EQUIPMENT AND			
		MATERIALS.			
	Total		12	120	

Optional unit

S/No	Reference Number	NOS Title	Credi	Guide d	Remark
/Unit			Value	Learn ing	
No				Hours	
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 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.

- 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)		PERFORMANCE CRITERIA	Evic Typ	d enc	:e		denc . Pag	
The learner will be able to:		The learner can:		е			e	
LO 1: Demonstrate	1.1	Wear clean, smart and appropriate Personal Protective Equipment.						
personal health and hygiene.	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	2.1	Explain the importance of working in a healthy, safe and hygienic workplace.						
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) be The learner will able to:		PERFORMANCE CRITERIA The learner can:	Evic Typ	l enco	9		f. F	nce Page	
	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.							

	2.8	Identify any hazards or potential hazards and deal with them correctly.							
	2.9	Explain information about health and safety in your workplace and how it can be obtained.							
	2.10	Describe the types of hazards in the workplace that may occur and how to deal with them.							
	2.11	Outline hazards that can be dealt with personally and those that should be reported to appropriate personnel.							
Lo 3: Understand its hazards and accide in the work	3.1	Explain how to warn other people about hazards and why this is important.							
place.	3.2	Explain why accidents and near accidents should be reported and who they should be reported to.							
	3.3	Describe the types of emergencies that may happen in the workplace and how to deal with them.							
LEARNING		PERFORMANCE CRITERIA	Fyic	ne b	CE	Fv	ide	nce	
		TEM OMPANOL OMPLEMEN							
OUTCOME (LO) be			Тур			Re	f. P	age	
		The learner can:					f. P		
OUTCOME (LO) be The learner will	3.4					Re	f. P		
OUTCOME (LO) be The learner will	3.4	The learner can: Identify where to locate the firstaid equipment and the registered first-aider in the work				Re	f. P		
OUTCOME (LO) be The learner will		The learner can: Identify where to locate the firstaid equipment and the registered first-aider in the work place. Describe safe handling techniques that should				Re	f. P		
OUTCOME (LO) be The learner will	3.5	The learner can: Identify where to locate the firstaid equipment and the registered first-aider in the work place. Describe safe handling techniques that should be followed. Mention ways of working safely that are relevant to own position				Re	f. P		
OUTCOME (LO) be The learner will	3.5	The learner can: Identify where to locate the firstaid equipment and the registered first-aider in the work place. Describe safe handling techniques that should be followed. Mention ways of working safely that are relevant to own position and why they are important. Describe organizational emergency procedures and how they should be followed. Mention possible causes of				Re	f. P		
OUTCOME (LO) be The learner will	3.5	The learner can: Identify where to locate the firstaid equipment and the registered first-aider in the work place. Describe safe handling techniques that should be followed. Mention ways of working safely that are relevant to own position and why they are important. Describe organizational emergency procedures and how they should be followed.				Re	f. P		

	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.

- 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

UNIT 02: Communicatio	II WIIC		l '	-		- 1			_		
LEARNING		PERFORMANCE CRITERIA			nce				dei		
OUTCOME (LO)			Typ	е			Ш	Ref	f. Pa	age	е
The learner will be		The learner can:						No.			
able to:											
LO 1: Demonstra e	1.1	Use simple verbal means to pass									
non-complex		information.									
communication	1.2	Use non-verbal means to pass									
system in a work		information e.g. body language.									
environment	1.3	Interpret symbols and signs									
		appropriately.									
Lo 2: Understand .	2.1	Locate the sources of information in									
sources of		an organization and work									
information in a work		environment.									
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 a	3.1	Locate communication equipment in									
means of .		the work environment.									
communication in	3.2	Use, effectively, communication									
work environment		equipment in a work environment.									
	3.3	Pass information to the right									
		personnel.									
	3.4	Pass information using Symbols,									
		signs and codes.									
LEARNING		PERFORMANCE CRITERIA	Evi	d	nce	9		Evi	deı	ıce	,
OUTCOME (LO)			Тур	е				Ref	f. P	age	е
The learner will be		The learner can:						No.			
able to:											
	3.5	Obey instructions in line with ethi s									
		of the work environment.									
		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.

- 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		PERFORMANCE CRITERIA		Evid ence Type			ence		
OUTCOME (LO) The learner will be		The learner can:	тур	е			er. lo.	Page	3
able to: 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. Discuss the relationship between the teams.							
	1.4	Explain the importance of team work.							
Lo 2: Know the requirement of the	3.1	Identify materials and tools required for each team member.							
teams	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	4.1	Describe the sequence of team activities.							
responsibilities	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.

- 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 DUTCOME (LO) The learner will be able to: LO: 1 Demonstrat : the use of Auto b dy tools 1.2 Identify the tools used in panel beating work. 1.3 Identify the tools used in spray painting work. 1.4 Identify the tools used in upholstery 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 panel beating 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 dy the use of Auto b equipment 2.1 Identify the equipment used in panel beating work 2.2 Identify the equipment used in upholstery work. 2.3 Identify the equipment used in locksmithing work 2.4 Identify the equipment used in upholstery work 2.5 Use the equipment used in locksmithing work 2.6 Use the equipment used in locksmithing work 2.7 Identify the equipment used in locksmithing work 2.8 Use the equipment used in locksmithing work 2.9 Use the equipment used in locksmithing work 2.1 Identify the equipment used in locksmithing work 2.2 Identify the equipment used in locksmithing work 2.3 Identify the equipment used in locksmithing work 2.4 Identify the equipment used in locksmithing work 2.5 Use the equipment in panel beating work PERFORMANCE CRITERIA Type Evidence Evidence Type Evidence Evidence Type The learner will be able to:	nco
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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	3.1	Identify the materials used in panel beating work.				
body materials	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.

- 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) The learner will be able to:		PERFORMANCE CRITERIA The learner can:				i. P	nce age	
LO: 1 Identify defects	1.1	Identify defects on door.						
on vehicle body panels	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	2.1	Observe extent of the defects.						
vehicle body panels	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.						
		том у сет поменения						
Lo 3: Carryout minor repairs on vehicle body	3.1	Repair minor dent on body panels mentioned in 1.1 to 1.6 above.						
panel	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 smentioned in 1.1 to 1.6.						
LO 4: Understand	4.1	Define joining.						
Auto body joining	4.2	Define joint.						
	4.3	State the types of joints.						
	4.4	Explain joining methods.						
	5.1	Define welding.						

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

	5.5	Select the appropriate welding for						
	3.3	different types of repairs.						
		different types of repairs.						
Lo 6: Know	6.1	List the tools for Oxy-Acetylene						
OxyAcetylene welding	0.1	welding.						
tools, equipment and	6.2	List equipment used for						
materials	0.2	OxyAcetylene welding.						
	6.3	List the materials used in						
	0.5	OxyAcetylene welding.						
	6.4	Distinguish flames in						
	0.4	OxyAcetylene welding.						
	6.5	Explain the derivation process of						
	0.5	flames in Oxy-Acetylene welding						
	6.6	Identify different types of cutting.						
	6.7	Explain safety precautions during						
	0.7	Oxy-Acetylene welding.						
	6.8	Carry out routine maintenance on						
	0.0	6.1 and 6.2 above.						
		0.1 and 0.2 above.						
Lo 7: Understand	7.1	Define Riveting.						
Riveting operation.	7.2	Mention types of Rivets.						
	7.3	Explain the appropriate type of						
	/.0	Rivets in different Auto body						
		works.						
Lo 8: Understand the	8.1	List the tools for Riveting.						
use of Riveting tools	8.2	List the materials use in Riveting.						
and materials.	8.3	Demonstrate the use of Riveting						
		gun.						
	8.4	Observe safety precautions durin						
		Riveting.						
LEARNING		PERFORMANCE CRITERIA	Evic	lenc	-	Evi	dence	, ,
OUTCOME (LO)			e Ty	ре		Ref	. Page	е
, ,						No.	_	
The learner will be		The learner can:						
able to:								
	8.5	Carry out maintenance on Rivetin 3						
		gun.						

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.

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.

- 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:	Evid ance Type				den f. Pa	
LO: 1 Understand	1.1	Mention the importance of painting.		Π				Τ
paint composition	1.2	List the paint components.						
	1.3	Mention the functions of the components listed in 1.2.						
Lo 2: Understand	2.1	List the tools for spray painting						
the use of spray painting tools and	2.2	List the equipment used in spray painting						
equipment	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	3.1	Define Viscosity.						
paint mixing	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.

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.

- 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

UNIT 07: Introduc		PERFORMANCE CRITERIA	Evid	nc:	e	Ev	iden	ce
OUTCOME (LO)			Туре			Re No	f. Pa	ıge
The learner will be able to:		The learner can:						
LO 1: Understand	1.1	List the designs available in Auto					Т	
basic design and		upholstery construction.						
construction in	1.2	List the tools used in upholstery.						
Auto 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	2.1	Discuss the steps in upholstery						
the method of		construction.						
construction in	2.2	Explain the sequence of assembling						
Auto upholstery		the carcass of upholstery.						
	2.3	Define webbing.						+
	2.4	List the types of materials used in						
		webbing.						
Lo 3: Understand	3.1	Explain the need for accurate						
methods of	3.1	measurement in Auto upholstery.						
covering and	3.2	Explain the need for allowing correct						+
fixing upholstery	0.2	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		PERFORMANCE CRITERIA	Evid	enc:	e	Ev	iden	ce
OUTCOME (LO)			Туре				f. Pa	ıge
						No		
The learner will		The learner can:						
be able to:				1			<u> </u>	
	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.

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.

- 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) The learner will be able to:		PERFORMANCE CRITERIA The learner can:		Evid ance Type				Evidenc Ref. Pag No.				
LO 1: Know the	1.1	Explain locksmithing in Auto body										
basics of		works.										
locksmithing	1.2	Identify the following 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	2.1	Explain power tools.										
the operation of	2.2	List the power tools use in										
power tools.		locksmithing.										
	2.3	Identify the power tools used in locksmithing.										
	2.4	Describe the operation of the following: • 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)		Type						ide f. P				
The learner will be able to:		The learner can:										
Lo 3: Know types	3.1	Mention types of keys.										
of keys	3.2	Mention the functions of keys.										
	3.3	State the principle of operation of keys.										

	•				_	 	
Lo 4: Understand	4.1	Identify fundamentals of					
vehicle opening		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:					
		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)
- q. 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.*

- 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	Reference	NOS Title	Credi	Guide d	Remark
/Unit	Number		Value	Learn ing	
No				Hours	
1	AUT/ABW /001/L3	HEALTH, SAFETY A ID	2	20	Level 3
		ENVIRONMENT III			
2	AUT/ABW /002/L3	COMMUNICATION AND	2	20	Level 3
		INTERPERSONAL S (ILLS III			
3	AUT/ABW /003/L3	TEAM WORK III	2	20	Level 3
4	AUT/ABW /004/L3	MAINTENANCE OF TOOLS N	2	20	Level 3
		AND EQUIPMENT I AUTO			
		BODY WORKS			
5	AUT/ABW /005/L3	REMOVAL AND RE :ITTING	6	60	Level 3
		OF AUTO BODY			
		COMPONENTS			
	Total	<u> </u>	14	140	

Optional unit

S/No	Reference	NOS Title		Credi	Guide d	Remark
/Unit	Number			Value	Learn ing	
No					Hours	
1	AUT/ABW /006/L3	BODY DEFECT REP	IRS	5	50	Level 3
2	AUT/ABW /007/L3	VEHICLE REFINISHI SPRAY PAINTING)	NG (AUTO	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.

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.

- 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		PERFORMANCE CRITERIA	-	Evid	n	CD	F	/ide	ence	
OUTCOME (LO)		TEM OMPIANOE OMFEMIA		-viu Гуре					Page	
The learner will be		The learner can:		ype			N		age	
able to:		The teather can.					14	U.		
LO: 1	1 1	Manualana anantandan nangariat a			T			Т	П	
Demonstrate	1.1	Wear clean, smart and appropriat								
Personal health	1.0	Personal Protective Equipment.								
and hygiene	1.2	Work safely at all times, complyin g 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	2.1	Describe the importance of								
Hygienic, safe and		working in a healthy, safe and								
hazard free		hygienic workplace.								
Workplace.	2.2	Report any accidents or near accidents promptly and accuratel to the proper personnel.								

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evic Typ	nce		ide f. P	
	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	3.1	Carry out organizational					
hazards and accidents in a		procedures on how to warn other people about hazards and why thi					
work environment		is important.					

LEARNING OUTCOME (LO) The learner will be able to:		PERFORMANCE CRITERIA The learner can:	Evic Typ	nce		f. P	nce age	
	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		PERFORMANCE CRITERIA	Evic	1 31	nce		Evi	ideı	nce	į
OUTCOME (LO)		The learner can:	Тур					f. P	age	•
OUTCOME (LO) The learner will be able to:		The learner can:					Re No		age	
The learner will be	3.13	The learner can: Describe organizational security procedures and why these are important.							age	•
The learner will be	3.13	Describe organizational security procedures and why these are							age	

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.

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.

- 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		nication and Interpersonal Skills III PERFORMANCE CRITERIA	Evid	l ve			Ev	ida	nce	
		PERFORMANCE CRITERIA	Evid		ice					
OUTCOME (LO) The learner will be		The learner can:	Тур	е					age	
able to:		rne tearner can:					No).		
	11	Describe how to use of sudia		П	T				П	
LO 1: Understand	1.1	Describe how to use of audio,								
communication		electronic, electro-magnetic means								
system in a Work	1 0	to pass information.							\vdash	
Environment	1.2	Describe simple non-verbal means of communication.								
	1.3								\vdash	
		Read symbols and signs correctly.				-			$\vdash \vdash$	
	1.4	Interpret symbols and signs correctly.		-						
	0.1					_				
Lo 2: Know sourcest	2.1	Participate in making functional the								
of Information in a		source of information in work								
Work Environmen		environment.							$\vdash \vdash$	
	2.2	Access sources of information in work								
		environment.							\dashv	
	2.3	Relate with the source of information.							igwdapsilon	
	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	3.1	Ensure the accessibility of the								
Communication	3.1	communication equipment in the								
processes		work environment.								
LEARNING		PERFORMANCE CRITERIA	Evid	l ve	ice		Ev	ido	nce	
OUTCOME (LO)		PERFORMANCE CRITERIA			ice				age	
The learner will be			Тур	_					age	
The tearner witt be		The learner can-					- Nia			
able to:		The learner can:					No	•		
able to:	3.2						No	•		
able to:	3.2	Describe the use of the various					No			
able to:	3.2	Describe the use of the various communication channels in work					No			
able to:		Describe the use of the various communication channels in work environment.					No			
able to:	3.2	Describe the use of the various communication channels in work environment. Demonstrate the use of various					No			
able to:		Describe the use of the various communication channels in work environment. Demonstrate the use of various communication means in work					No			
able to:	3.3	Describe the use of the various communication channels in work environment. Demonstrate the use of various communication means in work environment.					No			
able to:		Describe the use of the various communication channels in work environment. Demonstrate the use of various communication means in work environment. Ensure effective information flow to					No			
able to:	3.3	Describe the use of the various communication channels in work environment. Demonstrate the use of various communication means in work environment. Ensure effective information flow to the right personnel.					No			
able to:	3.3	Describe the use of the various communication channels in work environment. Demonstrate the use of various communication means in work environment. Ensure effective information flow to the right personnel. Ensure the effective deployment of					No			_
able to:	3.3 3.4 3.5	Describe the use of the various communication channels in work environment. Demonstrate the use of various communication means in work environment. Ensure effective information flow to the right personnel. Ensure the effective deployment of the use of symbols, signs and codes.					No			
able to:	3.3	Describe the use of the various communication channels in work environment. Demonstrate the use of various communication means in work environment. Ensure effective information flow to the right personnel. Ensure the effective deployment of					No			_

Lo 4: Know the maintenance of	4.1	Ensure that communication equipment are in good working				
Communication		condition				
equipment in wor environment	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.

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.

- 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

UNII 03:	Team	1 440	•				I		
LEARNING			PERFORMANCE CRITERIA		l end	е		iden	
OUTCOME (LO)				Туре	е		Re	f. Pa	ıge
The learner will be			The learner can:				No		
able to:									
LO 1: Know how t)	1.1	Identify the teams in a work						
appreciate team			environment e.g. upholstery, panel						
work in a work			beating, etc.						
environment		1.2	Identify the functions of each team.						
	—	1.3	Discuss the functions of each team.						
	—	1.4	Differentiate between the functions						
		1.7	of each team.						
			or each team.						
La 2: Massu tha		2.1	Calcat materials and tools required						
Lo 2: Know the	е	2.1	Select materials and tools required						
requirements of t		0.0	for each team.			-			
teams		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		3.1	Recognize the sequence of team	_					
the Benefits of the			activities.						
various teams.		3.2	Differentiate the time frame of each						
			team activity.						
		3.3	Produce quality output as a team						
		0.0	player.						
			piayer.						
Lo 4: Know how t	, h	4.1	Communicate work related						
Communicate wit	'"	4.1	information/requirements clearly to						
co-workers,			team members.						
,				Fuid			End	don	
LEARNING			PERFORMANCE CRITERIA		l end	:e		den	
OUTCOME (LO)			-1 1	Тур	е			f. Pa	ıge
The learner will be	!		The learner can:				No	•	
able to:					1				1
subordinates and		4.2	Inform co-workers and superiors						
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 t					t	
			members/subordinates of the righ						
			Work techniques and methods.						
	-	4.6	Obtain clarification and advice from			\dashv		+	
		٠.٠	superiors when necessary.						
			superiors when helessally.			_			

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

RESOURCES: Organogram, Work plan, etc.

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.

- 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

OUTCOME (LO)		PERFORMANCE CRITERIA	Evid	3nce	•	E	vide	nce
			Туре				ef. F o.	Page
The learner will be able to:		The learner can:						
	1.1	Select the correct tools for panel						
select Auto body		beating operations.						
	1.2	Select the correct tools for spray						
equipment		painting operations.						
	1.3	Select the correct tools for Upholstery						
_		operations.						
	1.4	Select the correct tools for						
		Locksmithing operations.						
Lo 2: Know how t	2.1	Carry out marking out operations.						
use Auto body	2.2	Carry out filing operations.						
work tools	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 t	3.1	Discuss the types of maintenance.						
maintain auto	3.2	Carry out preventive maintenance of						
body work tools		the following tools/equipment:						
and equipment		Body jack						
		Hydraulic jack						
		Air compressor						
		 Grinding machine 						
LEARNING		PERFORMANCE CRITERIA	Evid	ence	,	E	vide	nce
OUTCOME (LO)			Туре			R	ef. F	age
` ,							0.	J
The learner will		The learner can:						
be able to:								
	3.3	Carry out minor repairs of the						
		following tools/equipment:						
1		Body jack						
		Hydraulic iack		l	1			
		Hydraulic jackAir compressor						

3.5	Store tools as specified by manufacturer's or workshop requirements.		
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.

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.

- 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		EFITTING OF AUTO BODY COMPONE PERFORMANCE CRITERIA	Evid)n4	re	Ev	ido	nce	
OUTCOME (LO) The learner will		The learner can:	Туре		ce		f. P	age	
be able to:		The teather ean.							
LO 1: Know how to use tools and equipment.	1.1	Identify the appropriate tools and equipment in carrying out remova and refitting of body panels.						\prod	
	1.2	Select the appropriate tools and lequipment in carrying out remova and refitting of body panels.							
	1.3	Ensure that the tools/equipment re a 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: Doors Bonnet Fenders Boot Mirrors Windscreen Head light Door mat Rear light Bumper Seats Door Chromes Carry out refitting of the compone mentioned in 2.1.							
LEARNING OUTCOME (LO) The learner will		PERFORMANCE CRITERIA The learner can:	Evid Type		ce		f. P	nce age	
be able to:									
	2.3	Ensure that the components are realigned according to manufacturer's specifications.							

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

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.

- 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

UNIT U6: BODY DETECT F	Lepan :		F, .:.				 al a	
OUTCOME (LO)		PERFORMANCE CRITERIA		Evid ance Type			 dend . Pag	_
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	2.1	Identify repair procedures.						
on Auto body panels	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:						
	3.2	Carry out repairs on defective chassis and frame.						

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evid Type	•	Ref	dend f. Pa	
The learner will be able to:		The learner can:			No.	•	
	3.3	Carry out repairs on a roof with the following defects: • Leak • Dent					

	3.4	Carry out repairs on corroded floor.				
	3.5	Carry out repairs on defective running board.				
	3.6	Carry out repairs on defective exhaust.				
	3.7	Repair major scratches on body panels				
	3.8	Repair major tears on body panels				
Lo 4: Know the us e of Damaged Dozer	4.1	Identify repairs that require the use of Damaged Dozer				
	4.2	Setup the Damaged Dozer, body press and body jack.				
	4.3	Use the equipment in 4.2 to amend the defective body part				
Lo 5: Understand the composition of metal	5.1	Explain the general characteristics of metals				
	5.2	Explain the following:Ferrous metalsNonferrous metals				
	5.3	Explain the application of the following: • Mild steel • Stainless steel • Copper				
		Aluminium				

LEARNING OUTCOME (LO) The learner will be		PERFORMANCE CRITERIA The learner can:	Evid Type	ce		ef. I	enc Pag	_
able to:		The teather 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: • Flash back arrestor • Generator • Regulator • Blow pipes • Nozzles • Oxy-Acetylene cylinders						

	6.2	Differentiate between water to								
		carbide and carbide to water								
		generator and other forms.								
	6.3	Demonstrate the formation of								
		acetylene using a carbide to water								
		system.								
	6.4	Describe the position of water in								
		the generators to show how wate								
		and carbide work together.								
	6.5	Connect an Oxy-Acetylene								
		welding unit.								
	6.6	Demonstrate the use of the								
		following welding systems:								
		Low pressure system								
		High pressure system								
Lo 7:	7.1	Prepare materials for welding.								
Carryout OxyAcetylene	7.2	Select suitable filler rod for the								
welding		job.								
	7.3	Demonstrate how to produce								
		l auitable flame for the eneration	l .							
		suitable flame for the operation.		Ш						<u> </u>
LEARNING		PERFORMANCE CRITERIA	Evid		ce				nc	
LEARNING OUTCOME (LO)			Evid Type		ce	 	Re	f. F	enc Pag	
OUTCOME (LO)		PERFORMANCE CRITERIA			ce			f. F		
OUTCOME (LO)					ce		Re	f. F		
OUTCOME (LO) The learner will	7.4	The learner can: Carry out pre heating before the			ce		Re	f. F		
OUTCOME (LO) The learner will	7.4	PERFORMANCE CRITERIA The learner can:			ce		Re	f. F		
OUTCOME (LO) The learner will	7.4	The learner can: Carry out pre heating before the			ce		Re	f. F		
OUTCOME (LO) The learner will		The learner can: Carry out pre heating before the use of filler rods. Weld prepared metal. Observe safety procedures durins			ce		Re	f. F		
OUTCOME (LO) The learner will	7.5	The learner can: Carry out pre heating before the use of filler rods. Weld prepared metal.			ce		Re	f. F		
OUTCOME (LO) The learner will able to:	7.5 7.6	The learner can: Carry out pre heating before the use of filler rods. Weld prepared metal. Observe safety procedures during the welding operation.			ce		Re	f. F		
OUTCOME (LO) The learner will able to: Lo 8:	7.5	The learner can: Carry out pre heating before the use of filler rods. Weld prepared metal. Observe safety procedures during the welding operation. Identify defects on the welded			ce		Re	f. F		
OUTCOME (LO) The learner will able to: Lo 8: Carryout defect	7.5 7.6 8.1	The learner can: Carry out pre heating before the use of filler rods. Weld prepared metal. Observe safety procedures during the welding operation. Identify defects on the welded joints.			ce		Re	f. F		
OUTCOME (LO) The learner will able to: Lo 8: Carryout defect detection and	7.5 7.6	The learner can: Carry out pre heating before the use of filler rods. Weld prepared metal. Observe safety procedures during the welding operation. Identify defects on the welded joints. Rectify the identified defects in			ce		Re	f. F		
OUTCOME (LO) The learner will able to: Lo 8: Carryout defect	7.5 7.6 8.1	The learner can: Carry out pre heating before the use of filler rods. Weld prepared metal. Observe safety procedures during the welding operation. Identify defects on the welded joints. Rectify the identified defects in 8.1.			ce		Re	f. F		
OUTCOME (LO) The learner will able to: Lo 8: Carryout defect detection and	7.5 7.6 8.1 8.2 8.3	The learner can: Carry out pre heating before the use of filler rods. Weld prepared metal. Observe safety procedures during the welding operation. Identify defects on the welded joints. Rectify the identified defects in 8.1. Assess rectified welded joint.			ce		Re	f. F		
OUTCOME (LO) The learner will able to: Lo 8: Carryout defect detection and	7.5 7.6 8.1	The learner can: Carry out pre heating before the use of filler rods. Weld prepared metal. Observe safety procedures during the welding operation. Identify defects on the welded joints. Rectify the identified defects in 8.1. Assess rectified welded joint. Observe safety precautions in			ce		Re	f. F		
OUTCOME (LO) The learner will able to: Lo 8: Carryout defect detection and	7.5 7.6 8.1 8.2 8.3	The learner can: Carry out pre heating before the use of filler rods. Weld prepared metal. Observe safety procedures during the welding operation. Identify defects on the welded joints. Rectify the identified defects in 8.1. Assess rectified welded joint.			ce		Re	f. F		

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		PERFORMANCE CRITERIA	Evid	enc	ce		E	vide	nce	
OUTCOME (LO)			Туре				R	ef. F	Page	•
							N	0.		
The learner will		The learner can:								
be able to:										
LO 1: r	1.1	Identify types of paint.								
Understand colou	1.2	Identify paints and their colour								
codes		codes.								
	1.3	Classify auto body paints and their								
		properties.				_				
	1.4	Differentiate between straight pairt								
		and metallic paint.				_				
Lo 2: Understand	2.1	List the types of spray gun.				_				
tools and	2.2	List the types of spray painting								
equipment in		equipment.				4				
spray painting	2.3	Identify the faults associated with								
		the use of spray guns and other								
	- 1	spray painting equipment.				4				
	2.4	Rectify the faults associated with the								
	0.5	use of spray guns.				_				
	2.5	Carry out routine maintenance on								
		the following:								
		Air compressor Pine work								
		Pipe work Air regulator								
	2.6	Air regulator Observe sets prostices in the year.				\dashv				
	2.0	Observe safe practices in the use								
		spray painting tools and equipme it.				4				
La 2: Branara	3.1	Select correct tools and equipme it				+				
Lo 3: Prepare surface for	3.1	for preparing surfaces.								
refinishing	3.2	Demonstrate method of preparing				┪				
reminishing	3.2	surfaces:								
		Paint removal								
LEARNING		PERFORMANCE CRITERIA	Evid	'n	ce.		F	vide	nce	
OUTCOME (LO)		TERIORITANOE ORTERIA	Туре						age	
00100112 (20)						o o.	~S`	•		
The learner will		The learner can:					'`			
be able to:		3.5								
		Body filling								
	3.3	Apply body filler on affected surface.				\dashv				
	3.4	Carry out sanding operation.				\dashv				
	3.5	Assess sanding operation.			\vdash	\dashv				
	3.6	Apply putty filler.			$\vdash \vdash$	\dashv			\vdash	
	3.7	Smooth putty filler.				1				
	3.8	Assess smoothening of putty filler.				-				
	٥.٥	Assess smoothering or putty filler.								

	3.9	Carry out cleaning on prepared surface.				
	3.10	Carry out masking on prepared surface.				
Lo 4: Apply spray paint on surfaces	4.1	Carry out paint mixing using appropriate method.				
	4.2	Select tools and equipment in carrying out refinishing.				
	4.3	Apply primer on prepared surface.				
	4.4	Apply base coat on the primed surface.				
	4.5	Apply clear coat on the painted surface.				
	4.6	Apply appropriate techniques during spray painting.				
	4.7	Apply safety precautions in spray painting operation.				
Lo 5:	5.1	Explain the types of paint defects.				
Correct paint defects	5.2	Examine a painted surface for defects.				
	5.3	Correct defects on painted surface.				
	5.4	Polish a painted surface.				

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:		Evid ance Type		Туре		Evidence Ref. Page No.			
LO 1: Demonstrat : use of tools and equipment in locksmithing	1.1	locksmithing: Basic Hand tools Measuring hand tool Edge hand tool Special locksmithing tools									
	1.3	jig saws. Demonstrate the safe operation of key machines. Demonstrate the safe operation of									
	1.5	· · · · · · · · · · · · · · · · · · ·									
	1.7	Observe safety during 1.2 to 1.6.									
Lo 2: Dismantle a ıd assemble locks	2.1	Dismantle the following: • Warded lock • Lever lock • Pin tumbler cylinder • Padlock									
	2.2	Assemble the following: Warded lock Lever lock Pin tumbler cylinder Padlock									
	2.3	Describe recombination of the following lock mechanisms: Pin tumbler cylinders Lever locks									
LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA Evid ence Type					ideı f. Pa				
The learner will be able to:		The learner can:									
		Tubular locksWafer locks									
Lo 3:	3.1	Measure keys									
	3.2	Duplicate keys using hand tools									

Demonstrate the	3.3	Duplicate keys using key machine				
method of originating	3.4	Duplicate broken key				
and duplicating keys	3.5	Describe the method of originating a key by:				
		<u> </u>				
Lo 4: Demonstrate the	4.1	Describe doors and lock hardware				
installation of locks	4.2	Install the following:				
and key programming		 Door locks 				
		 Cabinet locks 				
		 Ignition key assemble 				
	4.3	Service the following:				
		 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

UNIT 09: Auto Upl	lotstery		1						
LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evid Type		се				nce age
OUTCOME (LO)			Туре				No		age
The learner will		The learner can:							
be able to:									
LO 1: Carryout	1.1	Take accurate measurements.							
measurement and	1.2	Record measurements correctly.							
pattern making	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: • 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.							
	0.1	71 .:							
Lo 3: Carryout	3.1	Identify defective frame structures	-			-			_
repairs on frame structures	3.2	Remove frame structures safely	-			-			_
structures	3.3	Repair defective frame structures							
LEADNING	3.4	Fix frame structures safely	F. d.d	L	L!			: -1 - :	
LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evid Type		ce			f. P	nce age
The learner will be able to:		The learner can:							
	3.5	Adhere to manufacturer's standard.							
Lo 4: Maintain 4.1		Distinguish between corrective ad							
tools and		preventive maintenance.					+		
equipment	4.2	Maintain tools and equipment.				-			_
	4.3	Store tools correctly after use							

4	1.4	Observe safety procedures in 4.1 to 4.3.					
Learners Signature:			Date:				
Assessors Signature:			Date:				
IQA Signature (if sampled	l)		Date:				
EQA Signature (if sample	ed)		Date:				

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

List of Participants (Zero Draft)

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