Skills & Education Group Awards

Qualification Guidance Document

SEG Awards Level 1 Award, Certificate and Diploma in Motor Vehicle Studies

England
Level 1 Award – 500/4242/7
Level 1 Certificate – 500/4220/8
Level 1 Diploma – 500/4209/9

About Us

At Skills and Education Group Awards we continually invest in high quality qualifications, assessments and services for our chosen sectors. As a UK leading sector specialist, we continue to support employers and skills providers to enable individuals to achieve the skills and knowledge needed to raise professional standards across our sectors.

Skills and Education Group Awards have an on-line registration system to help customers register learners on its qualifications, units and exams. In addition, it provides features to view exam results, invoices, mark sheets and other information about learners already registered.

The system is accessed via a web browser by connecting to our secure website using a username and password: Skills and Education Group Awards Secure Login

Sources of Additional Information

The Skills and Education Group Awards website provides access to a wide variety of information.

Copyright

Specification Code

The specification code is A5520-01, C5520-01 and D5520-01.

Issue	Date	Details of change
9.2	April 2026	Updated to new company branding

This guide should be read in conjunction with the Indicative Content document which is available on our secure website using the link above.

Contents

This is a live document and as such will be updated when required. It is the responsibility of the approved centre to ensure the most up-to-date version of the Qualification Specification is in use. Any amendments will be published on our website and centres are encouraged to check this site regularly.

Qualification Summary

Level 1 Award in Motor Vehicle Studies – 500/4242/7 Level 1 Certificate in Motor Vehicle Studies – 500/4220/8 Level 1 Diploma in Motor Vehicle Studies – 500/4209/9								
Qualification Purpose	B. Prepare for further learning or training and/or develop knowledge and/or skills in a subject area. B1. Prepare for further learning or training, B2. Develop knowledge and/or skills in a subject area							
Age Range	Pre 16	✓	16-18	✓	18+	✓	19+	✓
Regulation	The above qualifications are regulated by Ofqual							
Assessment	Internal assessment Internal and external moderation							
Type of Funding Available	See FaLA (Find a Learning Aim)							
Grading	Pass							
Operational Start Date	01/07/2008							
Review Date	31/08/2028							
Operational End Date								
Certification End Date								
Guided Learning (GL)	Award – 120 Certificate – 240 Diploma - 380							
Total Qualification Time (TQT)	Award – 120 Certificate – 240 Diploma - 380							
Credit Value	Award – 12 Certificate – 24 Diploma - 38							
Skills and Education Group Awards Sector	Engineering and Manufacturing Technologies							
Regulator Sector	4.3 Transportation Operations and Maintenance							
Support from Trade Associations	IMI / Automotive Skills							

Introduction

The SEG Awards Level 1 Award / Certificate / Diploma in Motor Vehicle Studies encourage and enable learners who have an interest in this area of study to acquire knowledge and skills to aid progression to further study or employment.

Pre-requisites

Learners must be aged 14+ who have an interest in Motor Vehicle Studies.

Skills and Education Group Awards expects approved centres to recruit with integrity on the basis of a trainee's ability to contribute to and successfully complete all the requirements of a unit(s) or the full qualification.

Qualification Structure and Rules of Combination

Rules of Combination: Level 1 Award in Motor Vehicle Studies

Learners must achieve a minimum of 12 credits. 4 credits must come from Mandatory Group A and a further 8 credits from Optional Units in Group B.

Unit Title	Unit Number	Level	Credit Value	GL
Mandatory Unit – Group A				
Health and Safety for Motor Vehicle Studies	H/501/7005	1	4	40
Optional Units – Group B				
Introduction to Engineering Equipment and Materials	A/501/7009	1	4	40
Introduction to Compression Ignition Power Units	M/501/7010	1	4	40
Introduction to Spark Ignition Power Units	T/501/7011	1	4	40
Introduction to Engine Liquid Cooling and Engine Lubrication Systems	A/501/7012	1	4	40
Introduction to Spark Ignition and Compression Ignition Fuel Systems	F/501/7013	1	4	40

Introduction to Vehicle Transmission Systems	J/501/7014	1	4	40
Introduction to Battery and Lighting Systems	L/501/7015	1	4	40
Introduction to Steering and Suspension	R/501/7016	1	4	40
Introduction to Vehicle Braking Systems	Y/501/7017	1	4	40
Introduction to Vehicle Inspection	D/501/7018	1	4	40
Introduction to Vehicle Body Repair	H/501/7019	1	4	40
Introduction to Vehicle Refinishing	Y/501/7020	1	4	40
Introduction to Customer Care	D/501/7021	1	1	10
Introduction to Vehicle Wheels and Tyres	H/501/7022	1	2	20
Introduction to Vehicle Exhaust Systems	M/501/7024	1	2	20
Introduction to Vehicle Ignition Systems	A/501/7026	1	2	20
Introduction to Vehicle Valeting	J/501/7028	1	4	40
Introduction to Motorcycle Maintenance	L/501/7029	1	4	40
If learners achieve credits from units of the same title (or linked titles) at more than one level, they cannot count credits achieved from both units towards the credit target of a qualification.				

Rules of Combination: Level 1 Certificate in Motor Vehicle Studies

Learners must achieve a minimum of 24 credits. 4 Credits must come from Mandatory Group A. A minimum of 20 credits must come from Optional Units in Group B.

Unit Title	Unit Number	Level	Credit Value	GL
Mandatory Unit – Group A				
Health and Safety for Motor Vehicle Studies	H/501/7005	1	4	40
Optional Units – Group B				
Introduction to Engineering Equipment and Materials	A/501/7009	1	4	40
Introduction to Compression Ignition Power Units	M/501/7010	1	4	40
Introduction to Spark Ignition Power Units	T/501/7011	1	4	40
Introduction to Engine Liquid Cooling and Engine Lubrication Systems	A/501/7012	1	4	40
Introduction to Spark Ignition and Compression Ignition Fuel Systems	F/501/7013	1	4	40
Introduction to Vehicle Transmission Systems	J/501/7014	1	4	40
Introduction to Battery and Lighting Systems	L/501/7015	1	4	40
Introduction to Steering and Suspension	R/501/7016	1	4	40
Introduction to Vehicle Braking Systems	Y/501/7017	1	4	40
Introduction to Vehicle Inspection	D/501/7018	1	4	40
Introduction to Vehicle Body Repair	H/501/7019	1	4	40
Introduction to Vehicle Refinishing	Y/501/7020	1	4	40

Introduction to Customer Care	D/501/7021	1	1	10
Introduction to Vehicle Wheels and Tyres	H/501/7022	1	2	20
Introduction to Vehicle Exhaust Systems	M/501/7024	1	2	20
Introduction to Vehicle Ignition Systems	A/501/7026	1	2	20
Introduction to Vehicle Valeting	J/501/7028	1	4	40
Introduction to Motorcycle Maintenance	L/501/7029	1	4	40
If learners achieve credits from units of the same title (or linked titles) at more than one level, they cannot count credits achieved from both units towards the credit target of a qualification.				

Rules of Combination: Level 1 Diploma in Motor Vehicle Studies

Learners must achieve a minimum of 38 credits. 4 Credits must come from Mandatory Group A. A minimum of 34 credits must come from Optional Units in Group B.

Unit Title	Unit Number	Level	Credit Value	GL
Mandatory Unit – Group A				
Health and Safety for Motor Vehicle Studies	H/501/7005	1	4	40
Optional Units – Group B				
Introduction to Engineering Equipment and Materials	A/501/7009	1	4	40
Introduction to Compression Ignition Power Units	M/501/7010	1	4	40
Introduction to Spark Ignition Power Units	T/501/7011	1	4	40
Introduction to Engine Liquid Cooling and Engine Lubrication Systems	A/501/7012	1	4	40

Introduction to Spark Ignition and Compression Ignition Fuel Systems	F/501/7013	1	4	40
Introduction to Vehicle Transmission Systems	J/501/7014	1	4	40
Introduction to Battery and Lighting Systems	L/501/7015	1	4	40
Introduction to Steering and Suspension	R/501/7016	1	4	40
Introduction to Vehicle Braking Systems	Y/501/7017	1	4	40
Introduction to Vehicle Inspection	D/501/7018	1	4	40
Introduction to Vehicle Body Repair	H/501/7019	1	4	40
Introduction to Vehicle Refinishing	Y/501/7020	1	4	40
Introduction to Customer Care	D/501/7021	1	1	10
Introduction to Vehicle Wheels and Tyres	H/501/7022	1	2	20
Introduction to Vehicle Exhaust Systems	M/501/7024	1	2	20
Introduction to Vehicle Ignition Systems	A/501/7026	1	2	20
Introduction to Vehicle Valeting	J/501/7028	1	4	40
Introduction to Motorcycle Maintenance	L/501/7029	1	4	40
If learners achieve credits from units of the same title (or linked titles) at more than one level, they cannot count credits achieved from both units towards the credit target of a qualification.				

Aim

The aim of this qualification is to offer learners and centres a flexible bank of units that can be tailored into specialised learning packages in areas of interest that deliver an introduction to the motor vehicle industry providing an overview of potential occupations and job roles within. The overall aim is to provide both

experience and knowledge on which to base future career and associated progression decisions, and to enhance employment prospects.

The SEG Awards Level 1 Award and Certificate in Motor Vehicle Studies are also offered as Specialist Learning for the Engineering Diploma at level 1 and are included within the Foundation Learning Tier (FLT).

Target Group

These qualifications are designed for:

- The mature learner who is seeking re-entry into the employment market, but who has insufficient qualifications and/or experience to compete for work
- 16–19 year olds in post-school education or training, particularly those with limited previous achievement, who wish to pursue a vocational course as a foundation to employment
- School/FE link (14-16 year olds) learners who are looking for an introductory programme of a vocational type for progression into further education and/or employment
- Those in employment in the motor vehicle service and repair industry who need to acquire appropriate job-related qualifications
- Learners taking the Engineering Diploma who wish to take Specialist Learning in Motor Vehicle studies

The qualifications sit within the following Progression Pathways in the Foundation Learning Tier.

Level 1 Award in Motor Vehicle Studies
Independent Living / Supported Employment
14-16 Entry Level

Level 1 Certificate in Motor Vehicle Studies
Full Level 2
Skilled Employment including Apprenticeships
14-16 Entry Level

Assessment

This qualification is internally assessed and requires internal and external moderation. Specific requirements and restrictions may apply to individual units within qualifications. Please check unit and qualification details for specific information.

Centres must take all reasonable steps to avoid any part of the assessment of a learner (including any internal quality assurance and invigilation) being undertaken by any person who has a personal interest in the result of the assessment.

Resources

Skills and Education Group Awards provides the following additional resources for this qualification:

- Purpose Statement
- Learner Unit Achievement Checklist
- Indicative Content
- Learner Assessment Record Book

Practice Assessment Material

Skills and Education Group Awards confirm that there are no practice assessment material for this qualification.

Teaching Strategies and Learning Activities

Centres should adopt a delivery approach which supports the development of all individuals. The aims and aspirations of all the learners, including those with identified special needs or learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

Progression Opportunities

Successful completion of the Level 1 Award in Motor Vehicle Studies provides learners with the opportunity to progress on to the SEG Awards Level 1 Certificate or Diploma in Motor Vehicle Studies.

Successful completion of the Level 1 Certificate in Motor Vehicle Studies provides a sound preparation for further vocational training, such as continuing onto the Level 1 Diploma in Motor Vehicle Studies or Apprenticeships at Level 2 in:

- Vehicle Fitting
- Vehicle Maintenance and Repair
- Vehicle Body and Paint Operations
- Roadside Assistance and Recovery
- Vehicle Parts Operations
- Vehicle Sales

Successful completion of the Level 1 Diploma in Motor Vehicle Studies provides a sound preparation for further vocational training, such as continuing onto other related qualifications at Level 2 or Apprenticeships at Level 2 in:

- Vehicle Fitting
- Vehicle Maintenance and Repair
- Vehicle Body and Paint Operations
- Roadside Assistance and Recovery
- Vehicle Parts Operations
- Vehicle Sales

Centres should be aware that Reasonable Adjustments, which may be permitted for assessment, may in some instances limit a learner's progression into the sector. Centres must, therefore, inform learners of any limits their learning difficulty may impose on future progression.

Tutor / Assessor Requirements

Skills and Education Group Awards require those involved in the teaching and assessment process to be suitably experienced and / or qualified. Assessors should also be trained and qualified to assess or be working towards appropriate qualifications.

Those responsible for Internal Quality Assurance (IQA) must be knowledgeable of the subject/occupational area to a suitable level to carry out accurate quality assurance practices and processes.

Language

This specification and associated assessment materials are in English only.

Mandatory Unit Details

Health and Safety for Motor Vehicle Studies		
Unit Reference	H/501/7005	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this mandatory unit learners will explore the responsibility of the employer and employee and the requirements of basic health and safety legislation. They will identify workshop hazards and basic safety procedures.	
Learning Outcomes (1 to 5)	**Assessment Criteria (1.1 to 5.2)**	
The learner will	**The learner can**	
1. Know health and safety procedures and the responsibilities of employers and employees	1.1	Identify personal responsibilities and the responsibilities of others in the working environment
	1.2	Identify and use correctly equipment and procedures provided for health and safety in the workplace
	1.3	Demonstrate good housekeeping routines in the working environment
2. Know about PPE	2.1	Select and use correct Personal Protective Equipment
3. Know about COSHH	3.1	Identify four substances hazardous to health according to current regulations
	3.2	Demonstrate appropriate ways to dispose of waste products in accordance with environmental guidance
4. Know about safe manual handling	4.1	Know the principles of safe manual handling

	4.2	Demonstrate safe manual handling using appropriate equipment
5. Know about fire prevention and emergency procedures	5.1 5.2 5.3	Identify the principles of fire prevention Identify the type and location of fire extinguisher(s) in the working area State the procedure to follow in the event of an emergency evacuation
Mapping to National Occupational Standards Vehicle Maintenance and Repair 2005 G1: (EK: 1, 2, 3, 4, 5, 6. PO: a, b, c, d, e, f, g, h, I, j, k) G2: (EK: 1, 2, 3, 4, 5, 10, 12, 13, 14, 15. PO: a, b, c, d, h, I, k, l, o) Unit 44: (EK: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 18. PO: a, b, c, e, g, h, I, j, k)		

Optional Unit Details

Introduction to Engineering Equipment and Materials		
Unit Reference	A/501/7009	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit the learner will identify different materials and their properties. They will learn how to select and correctly use hand and power tools.	
Learning Outcomes (1 to 2)	**Assessment Criteria (1.1 to 2.2)**	
The learner will	**The learner can**	
1. Know about engineering materials	1.1	Identify vehicle components manufactured from: > Steel > Alloy steel > Non-ferrous metals > Thermo setting plastic materials > Thermo plastic materials
	1.2	Identify on a vehicle where the following are used: > Sealing compounds > Adhesives
2. Know how to use engineering tools	2.1	Identify and use appropriate engineering hand and power tools for > Measuring and marking out > Metal cutting and forming > Drilling > Thread forming
	2.2	Use these tools safely to produce a vehicle accessory or hand tool
Mapping to National Occupational Standards - No Mapping		

Introduction to Compression Ignition Power Units		
Unit Reference	M/501/7010	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit learners will investigate the main components of an engine, the operating principles of the four stroke compression ignition engine and the function of gaskets, seals and locking devices.	
Learning Outcomes (1 to 4)	**Assessment Criteria (1.1 to 4.2)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when working on compression ignition power units
2. Know about components of a compression ignition engine	2.1	Identify the major components of the compression ignition engine
	2.2	Using methodical procedures, dismantle and reassemble the main components of a four stroke compression ignition engine
3. Know about sealing and locking devices used upon compression ignition engines	3.1	Identify the most common sealing devices used on compression ignition engines to seal > Oil > Water > Gas > Fuel
	3.2	Identify from samples the main types of locking devices used on compression ignition engines
4. Know about specialist engine tools used with compression ignition engines	4.1	Give examples of specialist engine tools used with compression ignition engines

	4.2	Select and use specialist workshop tools for appropriate purpose, to include: > Torque wrench > Piston ring clamp
Mapping to National Occupational Standards Vehicle Maintenance and Repair 2005 MR02 (EK: 2, 19, 20, 21, 24, 29. PO: a, b, c, d, e, f, g, h, i.)		

Introduction to Spark Ignition Power Units		
Unit Reference	T/501/7011	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit the learner will find out about the main components of an engine, the operating principles of the four stroke spark ignition engine and the function of gaskets, seals and locking devices.	
Learning Outcomes (1 to 4)	**Assessment Criteria (1.1 to 4.2)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when working on spark ignition power units
2. Know about components of a spark ignition engine	2.1	Identify the major components of the spark ignition engine
	2.2	Using methodical procedures, dismantle and reassemble the main components of a four stroke spark ignition engine
3. Know about sealing and locking devices used upon spark ignition engines	3.1	Identify the most common sealing devices used on spark ignition engines to seal > Oil > Water > Gas > Fuel
	3.2	Identify from samples the main types of locking devices used on spark ignition engines
4. Know about specialist engine tools used with spark ignition engines	4.1	Give examples of specialist engine tools used with spark ignition engines
	4.2	Select and use specialist workshop tools for appropriate purpose, to include:

		> Torque wrench > Piston ring clamp
Mapping to National Occupational Standards Vehicle Maintenance and Repair 2005 MR02 (EK: 2, 19, 20, 21, 24, 29. PO: a, b, c, d, e, f, g, h, i.)		

Introduction to Engine Liquid Cooling and Engine Lubrication Systems		
Unit Reference	A/501/7012	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit learners will investigate the main components of liquid cooling and lubrication systems and the reasons for each. They will learn about maintenance procedures and the precautions to be taken when working on each system.	
Learning Outcomes (1 to 6)	**Assessment Criteria (1.1 to 6.1)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when working on engine cooling and lubrication systems
2. Know about cooling systems	2.1	Identify the major components of the engine cooling system
	2.2	Using methodical procedures > Drain and flush a vehicle liquid cooling system > Remove and replace a thermostat > Bleed a vehicle cooling system
3. Know how to use antifreeze	3.1	Demonstrate how to mix and install antifreeze solution for a given percentage and system capacity
	3.2	Test percentage of antifreeze solution
4. Be able to pressure test a cooling system	4.1	Demonstrate how to use a cooling system pressure tester, to test a vehicle's system for leaks
5. Know about engine lubrication systems	5.1	Identify the major components of the engine lubrication system

	5.2	Using methodical procedures > Change engine oil and filter > Check oil and top up oil level > Check for leakage > Check operation of engine oil warning light(s)
6. Be aware of environmental considerations	6.1	Demonstrate appropriate ways to dispose of waste products in accordance with environmental guidance
Mapping to National Occupational Standards Vehicle Maintenance and Repair 2005 MR01 (EK: 1, 3, 12, 16, 17, 18, 19, 21. PO: a, b, e, f, g, h, i.)		

Introduction to Spark Ignition and Compression Ignition Fuel Systems		
Unit Reference	F/501/7013	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit the learner will find out about the main components and the operating principles of vehicle fuel systems including routine maintenance procedures required for effective engine operation.	
Learning Outcomes (1 to 4)	**Assessment Criteria (1.1 to 4.1)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when working on engine fuel systems
2. Know the components of fuel systems	2.1	Identify the major parts of the fuel system of both the spark ignition and compression ignition engines, to include > Fuel tank > Fuel line > Fuel filter > Fuel pressurising system > Fuel metering system > Fuel delivery system > Air intake and filtration
3. Be able to change fuel and air filters	3.1	Change an engine air filter element
	3.2	Change a spark ignition engine fuel filter
	3.3	Change a compression ignition engine fuel filter and bleed system
	3.4	Perform visual check for fuel leakage
4. Be aware of environmental considerations	4.1	Demonstrate appropriate ways to dispose of waste products in accordance with environmental guidance

Mapping to National Occupational Standards
Vehicle Maintenance and Repair 2005
MR02 (EK: 1, 12, 15, 17, 18, 22. PO: a, b, e, f, g, h, i.)

Introduction to Vehicle Transmission Systems		
Unit Reference	J/501/7014	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit learners will learn about common vehicle transmission arrangements, the main component parts of manual and automatic systems and the lubricants used.	
Learning Outcomes (1 to 7)	**Assessment Criteria (1.1 to 7.1)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when working on engine fuel systems
2. Know vehicle transmission layouts	2.1	Identify vehicle transmission layouts as > Front engine front wheel drive > Front engine rear wheel drive > Mid engine rear wheel drive > Front engine four wheel drive
3. Know the units of a manual transmission system	3.1	Identify the location of the clutch, gearbox and final drive on a vehicle
4. Know the units of an automatic transmission system	4.1	Identify the location of the torque converter, gear box and final drive on a vehicle
5. Know the components of a manual clutch assembly	5.1	Identify, from samples, the main components of a manual clutch assembly as: > Clutch plate > Cover assembly > Thrust bearing
	5.2	Correctly assemble and align a manual clutch assembly onto an engine flywheel

6. Know how manual and automatic transmission systems are lubricated	6.1 6.2 6.3	Identify from appropriate data the lubricants used in manual transmission systems Identify from appropriate data the lubricant used in automatic transmission systems Perform a check and top up lubricant level/s in a manual transmission system
7. Be aware of environmental considerations	7.1	Demonstrate appropriate ways to dispose of waste products in accordance with environmental guidance

Mapping to National Occupational Standards

Vehicle Maintenance and Repair 2005

MR12 (EK: 2, 3, 8, 10, 15, 17, 18, 23, 24. PO: a, b, e, f, g, h, i.)

Vehicle Fitting 2005

VF08 (EK: 1, 9, 12, 13, 14. PO: a, b, c, f, g, j, k.)

Introduction to Battery and Lighting Systems		
Unit Reference	L/501/7015	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit the learner will explore the function, operation and routine procedures required on the vehicle battery and lighting system. They will explore the main components of the lighting, driver information and circuit protection systems.	
Learning Outcomes (1 to 7)	**Assessment Criteria (1.1 to 7.1)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when working on vehicle battery and lighting systems
2. Know about vehicle batteries	2.1	Identify the correct battery for a specified vehicle, e.g. diesel, petrol
	2.2	Using methodical procedures > locate a vehicle battery > remove a vehicle battery > refit a vehicle battery observing polarity connections
	2.3	Test vehicle battery voltage at > Engine off no load > Engine cranking > Engine running at 3000 revs
	2.4	Identify key findings from vehicle battery voltage tests
3. Know about external vehicle lighting systems	3.1	Locate the components of an vehicle external lighting system to include > Side lights > Head lamps

		> Direction indicators > Hazard warning lights > Stop lights > Reverse lights > Fog lights > Number plate lamps
	3.2	Perform a vehicle external lighting check
	3.3	Identify key findings from vehicle lighting check
	3.4	Replace the bulbs/lamps for at least one of the following: > Side lamps > Rear lamps > Direction indicator lamps
4. Know about internal vehicle lighting systems	4.1	Locate the components of a vehicle internal lighting system to include > Courtesy lights > Dashboard illumination lights > Driver information lights
5. Know about driver information warning lights	5.1	Locate and check the operation of at least six driver information warning lights to include > Oil Pressure Warning Light > No Charge Warning Light > Brake Warning Light
6. Know about vehicle circuit protection	6.1	Identify lighting circuit fuse location and value
	6.2	Locate, remove, test and replace a lighting circuit fuse
7. Be aware of environmental considerations	7.1	Demonstrate appropriate ways to dispose of waste products in accordance with environmental guidance
Mapping to National Occupational Standards Vehicle Maintenance and Repair 2005		

AE01 (EK: 1, 2, 9, 10, 11, 15, 16, 17, 18, 21, 23, 24, 25, 26, 29. PO: a, b, c, d, e, f, g, h, i, j, k, l.)

Introduction to Steering and Suspension		
Unit Reference	R/501/7016	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit the learner will find out about the layout of basic steering and suspension systems and the performing of routine maintenance tasks for these systems, following all relevant safety precautions.	
Learning Outcomes (1 to 5)	**Assessment Criteria (1.1 to 5.1)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when working on vehicle steering and suspension systems
2. Know how to remove and replace road wheels	2.1	Remove and replace road wheels with special attention to: > Safe jacking procedure > Use of correct jacking points > Use of axle stands > Use of torque wrench
3. Know about steering systems	3.1	Identify and locate main components of a non-power-assisted vehicle steering system
	3.2	Identify and locate main components of a power assisted vehicle steering system
	3.3	Check steering systems for excessive wear and identify key findings
	3.4	Remove and replace track rod end
	3.5	Check and adjust front wheel alignment

	3.6 3.7	Check power assisted steering systems for leaks Follow correct procedure to check and top-up power assisted steering fluid level
4. Know about suspension systems	4.1 4.2 4.3	Identify and locate the main components of a vehicle suspension system Check suspension system for excessive wear and identify key findings Remove and refit front or rear suspension damper
5. Be aware of environmental considerations	5.1	Demonstrate appropriate ways to dispose of waste products in accordance with environmental guidance
Mapping to National Occupational Standards Vehicle Fitting 2005 VF01 (EK: 1, 3, 4, 12, 15, 16, 22. PO: a, b, c, d, e, f, g, j, k)		

Introduction to Vehicle Braking Systems		
Unit Reference	Y/501/7017	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit the learner will explore the layout of basic braking systems and the performing of routine maintenance tasks for these systems, following all relevant safety precautions.	
Learning Outcomes (1 to 4)	**Assessment Criteria (1.1 to 4.1)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when working on vehicle braking systems
2. Know how to remove and replace wheels	2.1	Remove and replace road wheels with special attention to: > safe jacking procedure > use of correct jacking points > use of axle stands > use of torque wrench
3. Know about braking systems	3.1	Identify and locate the main components of a vehicle braking system to include > Master cylinder > Brake servo > Disc brakes > Drum brakes > Parking brake > Warning lights
	3.2	Identify the wheels that the parking brake operates
	3.3	Remove and replace disc pads and report on the condition of: > Brake pads > Brake discs

		> Brake calliper > Flexible brake hose
	3.4	Remove and replace brake drum and report on condition of: > Brake drum > Brake shoes > Brake wheel cylinders
	3.5	Perform checks on condition of: > Brake fluid > Operation of brake warning lights
	3.6	Check and top-up brake fluid reservoir
4. Be aware of environmental considerations	4.1	Demonstrate appropriate ways to dispose of waste products in accordance with environmental guidance
Mapping to National Occupational Standards Vehicle Maintenance and Repair 2005 MR01 (EK: 14, 17, 18, 19. PO: a, b, c, f, g, i, j.)		

Introduction to Vehicle Inspection		
Unit Reference	D/501/7018	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit the learner will learn the different types of vehicle inspections and how to carry out each to a specification. They will find out about the reasons for using and completing service records.	
Learning Outcomes (1 to 3)	**Assessment Criteria (1.1 to 3.4)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when undertaking routine vehicle inspection
2. Know about periodic vehicle inspections	2.1	Identify key periodic inspections that should be performed on a vehicle and the main reasons for carrying them out.
	2.2	Perform straightforward periodic maintenance to include checking and reporting on: > Engine oil level > Coolant level > Tyre condition, pressure and tread depth > Operation of all external lights > Screen washer fluid level > Brake/clutch fluid reservoir level > Condition of seatbelts > Foot pedal and handbrake lever travel > Driver information warning lights

3. Know about professional pre-sale vehicle inspection schedules	3.1	Identify key pre delivery inspections that would be undertaken by a professional vehicle retailer on a new vehicle and the main reasons for carrying them out
	3.2	Identify key pre delivery inspections that would be undertaken by a professional vehicle retailer on a used vehicle and the main reasons for carrying them out
	3.3	Perform straightforward pre-sale inspection on a used vehicle to include checking and reporting on > Engine oil level > Coolant level > Tyre condition, pressure and tread depth > Operation of all external lights > Screen washer fluid level > Brake/clutch fluid reservoir level > Condition of seatbelts > Foot pedal and handbrake lever travel > Driver information warning lights > Condition of interior and exterior body, paint and trim > Operation and condition of in car entertainment > Vehicle and passenger comfort systems > Vehicle security system > Vehicle documentation
	3.4	Employ industry standard documentation to identify findings of vehicle inspections

Mapping to National Occupational Standards

Vehicle Maintenance and Repair 2005

MR05 (EK: 10. PO: a, c, d.)
MR01 (EK: 17, 19. PO: k, i.)

Vehicle Fitting 2005
VF12 (EK: 3,8,10, 11, 16. PO: a, b, c.)

Introduction to Vehicle Body Repair		
Unit Reference	H/501/7019	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit the learner will explore the materials used in vehicle construction and the main body components. They will learn about minor repair, bodywork preparation and welding techniques.	
Learning Outcomes (1 to 6)	**Assessment Criteria (1.1 to 6.4)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when undertaking vehicle body repairs
2. Know about engineering materials used in body repair	2.1	Identify vehicle body components manufactured from: > Steel > Alloy steel > Non-ferrous metals > Thermo setting plastic materials > Thermo plastic materials > Glass
	2.2	Identify anti-corrosive materials
3. Know about body damage to vehicles panels	3.1	Give examples of body damage to vehicle panels
	3.2	Identify body damage that requires professional repair
	3.3	Give examples of body damage that can be rectified by non-professionals
4. Know how to use appropriate tools, materials	4.1	Select and use panel beating tools to repair minor vehicle body damage (hammers, dollies, etc.)

and techniques for minor body repair	4.2	Repair a damaged vehicle panel using plastic filler to achieve the correct contour
5. Know how to remove and refit body components	5.1	Remove and refit a vehicle door and one of the following body components > Bonnet > boot > hatch lid
	5.2	Remove and refit front and rear plastic bumpers
6. Know about welding techniques	6.1	Produce a spot weld lap joint
	6.2	Perform a destructive test on a spot weld
	6.3	Remove a spot weld with an appropriate tool or drill bit
	6.4	Replace a spot weld with a MIG plug
Mapping to National Occupational Standards Vehicle Body and Paint Operations 2005 BP02 (EK: 1, 3, 4, 5, 8, 9. PO: a, b, c, d, e, f, i.) BP05 (EK: 1, 5, 9, 11, 12, 13, 14, 18, 20. PO: a, b, e, I, k, l.) BP06 (EK: 1, 5, 8, 9, 11, 12, 13, 15, 17, 18, 21, 22, 23, 24, 26. PO: a, b, e, f, g, h.)		

Introduction to Vehicle Refinishing		
Unit Reference	Y/501/7020	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit learners will investigate bodywork and materials preparation, using correct abrasives, masking materials and different refinishing techniques. Learners will also identify and rectify paint defects and carry out surface enhancement.	
Learning Outcomes (1 to 7)	**Assessment Criteria (1.1 to 7.2)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when undertaking vehicle refinishing
2. Know about surface preparation	2.1	Select and use abrasives to prepare various substrates for the next operation
	2.2	Demonstrate the safe use of power equipment with particular attention to correct PPE
3. Understand the procedure for bodywork preparation prior to refinishing	3.1	Identify substrate to be refinished
	3.2	Demonstrate the correct methods and stages of surface preparation
	3.3	Demonstrate the correct methods of masking paintwork for the refinishing operation
4. Know how to mix and apply primers	4.1	Demonstrate the correct methods of preparing a range of primers for use
	4.2	Demonstrate the correct and safe methods of painting with primer/s to an acceptable standard

	4.3	Prepare primed surface to accept topcoat
5. Know how to apply a top coat	5.1 5.2 5.3	Demonstrate the correct methods of preparing a range of top coats and application equipment for use Demonstrate the correct safe method of painting panels with top coat Demonstrate the correct and safe method of servicing equipment after use with the above painting techniques
6. Know how to identify and correct basic paint defects	6.1 6.2	Identify basic paint defects Identify cause and rectification of paint defects
7. Know how to enhance paint finishes	7.1 7.2	Demonstrate the correct procedure for compounding, machine or hand glazing Apply polishes to protect the refinished surface
Mapping to National Occupational Standards Vehicle Body and Paint Operations 2005 BP07 (EK: 2, 3, 5, 6, 9, 10, 11, 12, 18, 24. PO: a, c, e, g, j, k, l.) BP09 (EK: 1, 3, 6, 10, 13, 20. PO: a, b, f.) BP08 (EK: 1, 3, 6, 10, 13, 15, 17, 19, 20, 21, 22, 26. PO: a, b, d, e, g, h, i, j.)		

Introduction to Customer Care		
Unit Reference	D/501/7021	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit learners will learn about the importance in this field of customer relations and the adoption of correct workplace procedures in dealing with customers.	
Learning Outcomes (1 to 4)	**Assessment Criteria (1.1 to 4.1)**	
The learner will	**The learner can**	
1. Recognise the elements of positive customer experience	1.1	Give an example of a positive customer experience
	1.2	Give an example of a negative customer experience
2. Understand the importance of the customer's experience to a business	2.1	Indicate how positive and negative customer experience could affect a business
3. Recognise own contribution to customer experience	3.1	Identify and demonstrate behaviours that would contribute to a positive customer experience when: > Greeting a customer > Answering customer questions > Relaying customer information or requests to the correct workplace person
	3.2	Identify and demonstrate behaviours that would contribute to a negative customer experience when: > Greeting a customer > Answering customer questions > Relaying customer information or requests to the correct workplace person

4. Know how to promote customer safety	4.1	Identify and demonstrate customer safety procedures

Mapping to National Occupational Standards

Vehicle Maintenance and Repair 2005
MR10 (EK: 7, 10. PO: c.)

Institute for Customer Service National Occupational Standards 2007
1.1.5, 1.2.2, 1.2.3, 1.2.4
2(a)1.1, 2(a)2.1, 2(a)2.2, 2(b)1.4, 2(b)2.5
3.1.8, 3.1.9
4.1.5, 4.1.8, 4.1.1, 5.2.1, 5.2.4

Introduction to Vehicle Wheels and Tyres		
Unit Reference	H/501/7022	
Level	1	
Credit Value	2	
Guided Learning (GL)	20	
Unit Summary	In this unit the learner will learn how to identify modern types of road wheels and tyres, their construction and correct usage including the carrying out of practical activities regarding wheels and tyres.	
Learning Outcomes (1 to 7)	**Assessment Criteria (1.1 to 7.1)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when working with wheels and tyres
2. Know how to remove and replace road wheels	2.1	Remove and replace road wheels with special attention to: > Safe jacking procedure > Use of correct jacking points > Use of axle stands > Use of torque wrench
3. Know how to inspect road wheels	3.1 3.2 3.3	Give examples of common wheel faults Perform visual inspection of road wheels for serviceability with particular attention to damage and attachment devices Identify key findings of inspection
4. Know about tyre maintenance	4.1	4.1 Using methodical procedures, carry out routine tyre maintenance with regard to > Checking and adjusting tyre pressures > Measuring tread depth > Removing inclusions from tread area

		> Inspecting sidewalls for damage
	4.2	Identify from samples common tyre faults
5. Know how to replace tyres	5.1	Remove a tyre (including valve assembly where appropriate) from a road wheel
	5.2	Identify the correct replacement tyre for a specified vehicle
	5.3	Fit a tyre in accordance with manufacturers guidance
	5.4	Re-inflate to correct pressure
6. Know how to balance wheels	6.1	Explain the purpose of balancing a wheel and tyre assembly
	6.2	Balance a wheel and tyre assembly in accordance with manufacturers guidance
7. Be aware of environmental considerations	7.1	Demonstrate appropriate ways to dispose of waste products in accordance with environmental guidance
Mapping to National Occupational Standards Vehicle Fitting 2005 VF01 (EK: 3,8,10, 11, 16, 22, 24. PO: a, b, c, d, j, k)		

Introduction to Vehicle Exhaust Systems		
Unit Reference	H/501/7022	
Level	1	
Credit Value	2	
Guided Learning (GL)	20	
Unit Summary	In this unit the learner will learn about modern vehicle exhaust systems their construction and correct usage including the carrying out of practical activities regarding inspection and replacement.	
Learning Outcomes (1 to 5)	**Assessment Criteria (1.1 to 5.1)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when working with vehicle exhaust systems
2. Know the main components of a vehicle exhaust system	2.1	Identify and locate the main components of a vehicle exhaust system to include: > Manifold > Catalytic converter > Oxygen sensor > Front pipe > Silencer
3. Know how to inspect a vehicle exhaust system	3.1 3.2 3.3	Give examples of common exhaust faults Perform visual inspection of exhaust system for serviceability with particular attention to leakage, corrosion, damage and security Identify key findings of inspection
4. Know how to replace a vehicle exhaust component	4.1 4.2	Remove an exhaust component Identify the correct replacement component for a specified vehicle

	4.3 4.4	Fit an exhaust component in accordance with manufacturers guidance Perform inspection to ensure correct alignment, security and sealing
5. Be aware of environmental considerations	5.1	Demonstrate appropriate ways to dispose of waste products in accordance with environmental guidance
Mapping to National Occupational Standards Vehicle Fitting 2005 VF09 (EK: 1, 4, 8, 11, 12, 13, 14. PO: c, d, g, h, i.)		

Introduction to Vehicle Ignition Systems		
Unit Reference	A/501/7026	
Level	1	
Credit Value	2	
Guided Learning (GL)	20	
Unit Summary	In this unit learners will learn about the main components of vehicle ignition systems their construction and correct usage including the carrying out of practical activities regarding inspection and replacement.	
Learning Outcomes (1 to 4)	**Assessment Criteria (1.1 to 4.1)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when working with vehicle ignition systems
	1.2	Identify and avoid specific risks associated with high tension systems
2. Know the main components of a vehicle ignition system	2.1	Identify and locate the main components of a vehicle ignition system to include: > Ignition coils > Spark plug leads > Spark plugs
	2.2	Identify the primary purpose of each
3. Know how to replace a vehicle ignition component	3.1	Remove and replace an ignition coil
	3.2	Remove, inspect and measure the resistance of an HT lead using correct equipment
	3.3	Replace the HT lead in the correct position
	3.4	Remove and examine spark plugs to identify signs of wear

	3.5 3.6	Replace spark plugs in accordance with manufacturers' guidance Start engine to check correct engine operation and throttle response
4. Be aware of environmental considerations	4.1	Demonstrate appropriate ways to dispose of waste products in accordance with environmental guidance
Mapping to National Occupational Standards Vehicle Maintenance and Repair 2005 AE03 (EK: 1. PO: d.) MR02 (EK: 11, 13, 22. PO: d.)		

Introduction to Vehicle Valeting		
Unit Reference	J/501/7028	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit the learner will find out about the selection and application of correct materials when valeting the exterior, interior and engine bay of motor vehicles. They will learn about the correct handling and disposal of waste.	
Learning Outcomes (1 to 6)	**Assessment Criteria (1.1 to 6.1)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when valeting vehicles
2. Know how to valet the exterior of vehicles	2.1	Valet vehicle exterior to include: > Selection and use of appropriate cleaning tools, materials and products for > Washing and drying vehicle exterior ensuring removal of dirt, detergent and water > Restoring surface finish to bodywork, bright work, exterior trim and glass > Protecting surface finish including bodywork, bright work and exterior trim
3. Know how to valet the interior of vehicles	3.1	Valet vehicle interior to include Selection and use of appropriate cleaning tools, materials and products for: > Carpets > Upholstery > Plastic trim > Glass

4. Know how to valet an engine bay	4.1 4.2	Demonstrate how to protect sensitive electronic components and the air intake prior and during an engine bay valet Select and use appropriate cleaning tools, materials, methods and products to clean engine bay
5. Know how to inspect a valeted vehicle	5.1 5.2	Perform visual inspection of a valeted vehicle for cleaning residues and surface finish Identify key findings of inspection and rectify any imperfections
6. Be aware of environmental considerations	6.1	Demonstrate appropriate ways to dispose of waste products in accordance with environmental guidance
Mapping to National Occupational Standards Vehicle Maintenance and Repair 2005 MR09 (EK: 1, 2, 8, 9, 10, 12, 13, 14, 16, 17. PO: a, b, c, e, f, i, j.)		

Introduction to Motorcycle Maintenance		
Unit Reference	L/501/7029	
Level	1	
Credit Value	4	
Guided Learning (GL)	40	
Unit Summary	In this unit learners will explore motorcycle maintenance including: frame assembly, power units, transmission / drive line, brakes, wheels and tyres.	
Learning Outcomes (1 to 6)	**Assessment Criteria (1.1 to 6.1)**	
The learner will	**The learner can**	
1. Work safely	1.1	Use safe working practices when working with motor cycles
2. Know the main components of the frame assembly	2.1	Identify the main components of a motor cycle frame assembly
3. Know how to disassemble and reassemble major motor cycle components	3.1	Remove and refit: > Body panels > Fairing > Mudguards
	3.2	Remove and refit fuel tank taking into account all necessary safety features
	3.3	Remove and refit rear damper unit
	3.4	Remove and refit a head and barrel assembly
	3.5	Perform a visual inspection of a head and barrel assembly to identify signs of excessive wear
	3.5	Remove and replace either motorcycle disc pads or brake shoes

4. Know the purpose and operation of safety switches	4.1 4.2	Identify the location and purpose of: > Neutral starter switch > Side stand safety switch > Kill switch Check correct operation of each
5. Know motorcycle maintenance procedures	5.1 5.2	Carry out straightforward periodic maintenance inspection of > Tyre pressures and condition > Brake lever travel > Suspensions for leakage and security > Lighting equipment condition and operation > Adjustment of final drive chain or belt > Condition and security of exhaust system > Engine / transmission assembly for oil leakage > Oil and fluid levels Identify key findings of maintenance inspection
6. Be aware of environmental considerations	6.1	Demonstrate appropriate ways to dispose of waste products in accordance with environmental guidance

Mapping to National Occupational Standards

Vehicle Body and Paint Operations 2005
BP03 (EK: 1, 7, 9. PO: a, c, e, j, i.)

Vehicle Maintenance and Repair 2005
MR01 (EK: 14, 15, 17, 18, 20. PO: i.)
MR04 (EK: 17, 18, 20, 26. PO: g.)
MR05 (EK: 9, 10, 11, 14. PO: a, b, c, d.)

Recognition of Prior Learning (RPL), Exemptions, Credit Transfers and Equivalencies

Skills and Education Group Awards policy enables learners to avoid duplication of learning and assessment in a number of ways:

- **Recognition of Prior Learning (RPL)** – a method of assessment that considers whether a learner can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and do not need to develop through a course of learning.
- **Exemption** - Exemption applies to any certificated achievement which is deemed to be of equivalent value to a unit within Skills and Education Group Awards qualification but which does not necessarily share the exact learning outcomes and assessment criteria. It is the assessor's responsibility, in conjunction with the Internal Moderator, to map this previous achievement against the assessment requirements of the Skills and Education Group Awards qualification to be achieved in order to determine its equivalence.
  - Any queries about the relevance of any certificated evidence should be referred in the first instance to your centre's internal moderator and then to Skills and Education Group Awards.
  - It is important to note that there may be restrictions upon a learner's ability to claim exemption or credit transfer which will be dependent upon the currency of the unit/qualification and a learner's existing levels of skill or knowledge.
  - Where past certification only provides evidence that could be considered for exemption of part of a unit, learners must be able to offer additional evidence of previous or recent learning to supplement their evidence of achievement.
- **Credit Transfer** – Skills and Education Group Awards may attach credit to a qualification, a unit or a component. Credit transfer is the process of using certificated credits achieved in one qualification and transferring that achievement as a valid contribution to the award of another qualification. Units/Components transferred must share the same learning outcomes and assessment criteria along with the same unit number. Assessors must ensure that they review and verify the evidence through sight of:
  - Original certificates OR
  - Copies of certificates that have been signed and dated by the internal moderator confirming the photocopy is a real copy and make these available for scrutiny by the External Moderator.
- **Equivalencies** – opportunities to count credits from the unit(s) from other qualifications or from unit(s) submitted by other recognised organisations towards the place of mandatory or optional unit(s) specified in the rule of combination. The unit must have the same credit value or greater than the unit(s) in question and be at the same level or higher.

Skills and Education Group Awards encourages its centres to recognise the previous achievements of learners through Recognition of Prior Learning (RPL), Exemption, Credit Transfer and Equivalencies. Prior achievements may have resulted from past or present employment, previous study or voluntary activities. Centres should provide advice and guidance to the learner on what is appropriate evidence and present that evidence to the external moderator in the usual way.

Further guidance can be found in 'Delivering and Assessing Skills and Education Group Awards Qualifications' which can be downloaded from skillsandeducationgroupawards.co.uk/for-centres

Certification

Learners will be certificated for all units and qualifications that are achieved and claimed.

Skills and Education Group Awards' policies and procedures are available on the website.

Exemptions

This qualification contains no exemptions. For further details see Recognition of Prior Learning (RPL), Exemptions, Credit Transfers and Equivalencies.

Glossary of Terms

GL (Guided Learning)
GL is where the learner participates in education or training under the immediate guidance or supervision of a tutor (or other appropriate provider of education or training). It may be helpful to think – 'Would I need to plan for a member of staff to be present to give guidance or supervision?'

GL is calculated at qualification level and not unit/component level.

Examples of Guided Learning include:

- Face-to-face meeting with a tutor
- Telephone conversation with a tutor
- Instant messaging with a tutor
- Taking part in a live webinar
- Classroom-based instruction
- Supervised work
- Taking part in a supervised or invigilated formative assessment
- The learner is being observed as part of a formative assessment.

TQT (Total Qualification Time)
The number of notional hours which represents an estimate of the total amount of time that could reasonably be expected to be required, in order for a learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of a qualification.' The size of a qualification is determined by the TQT.

TQT is made up of the Guided Learning (GL) plus all other time taken in preparation, study or any other form of participation in education or training but not under the direct supervision of a lecturer, supervisor or tutor.

TQT is calculated at qualification level and not unit/component level.

Examples of unsupervised activities that could contribute to TQT include:

- Researching a topic and writing a report
- Watching an instructional online video at home/e-learning
- Watching a recorded webinar
- Compiling a portfolio in preparation for assessment
- Completing an unsupervised practical activity or work
- Rehearsing a presentation away from the classroom
- Practising skills unsupervised
- Requesting guidance via email – will not guarantee an immediate response.