

Level 1 Diploma in Tyre Fitting Competence (4270-51)

October 2013 Version 1.4





Qualification at a glance

Subject area	Vehicle Tyre Fitting
City & Guilds number	4270
Age group approved	16+
Entry requirements	There are no entry requirements
Assessment	Online multiple choice tests (graded Pass, Merit, Distinction) and Portfolio of evidence
Fast track	Not available; automatic approval applies in some cases
Support materials	Centre handbook Practical assessment workbook
Registration and certification	See online catalogue/Walled Garden for last dates.

Title and level	City & Guilds number	Accreditation number
Level 1 Diploma in Tyre Fitting Competence	4270-51	501/0126/2

Version and date	Change detail	Section
1.1 (September 2011)	Small changes made to assessment methods for units 551 and 594	Assessment
1.2 (July 2012)	Correct Unit number	Units
1.3 (February 2013)	Range amendments Unit 551 - GLH/Credits amendments Unit 501 – Amendments to Assessment info	Units Assessment
1.4 (October 2013)	Unit supporting information updated with introductory text	Units



Contents

1	Introduction	4
	Structure	5
2	Centre requirements	6
	Approval	6
	Resource requirements	6
3	Delivering the qualification	8
	Initial assessment and induction	8
	Support materials	8
	Recording documents	8
	Health and safety	8
	Data protection and confidentiality	9
	Equal opportunities	9
	Access to assessment	9
	Appeals	9
4	Assessment	10
	Assessment of the qualification	10
	Recognition of prior learning (RPL)	10
	Test specifications	10
5	Units	12
Unit 001	Competency in health, safety and good housekeeping in the automotive environment	13
Unit 031	Competency in supporting working relationships in the automotive work environment	16
Unit 051	Knowledge of health, safety and good housekeeping in the automotive environment	19
Unit 081	Knowledge to support working relationships in the automotive work environment	28
Unit 501	Competency in inspection, repair and replacement of standard light vehicle tyres	32
Unit 503	Competency in inspection repair and replacement of commercial vehicle tyres	35
Unit 544	Competency in receiving and storing stock	38
Unit 551	Knowledge in inspection, repair and replacement of standard light vehicle tyres	40
Unit 553	Knowledge of inspection, repair and replacement of commercial vehicle tyres	45
Unit 594	Knowledge of receiving and storing stock	50
Appendix 1	Sources of general information	53



1 Introduction

This document tells you what you need to do to deliver the qualification:

Area	Description
Who is the qualification for?	<p>This Level 1 Diploma in Tyre Fitting Competence is for anyone developing a career in the motor industry. This practical qualification demonstrates candidates' skills on the job and in their own workplace showing that they meet national standards for automotive workers.</p> <p>The structure and assessment strategy have been produced by the Institute of the Motor Industry, who are the Sector Skills Council for the Automotive Industry.</p>
What does the qualification cover?	<p>Candidates cover areas such as removing and replacing a variety of tyres as well as receiving and storing stock. They are assessed in the workplace by using the following methods:</p> <ul style="list-style-type: none">• Portfolio• Assignments• City & Guilds' GOLLA multiple choice test
Is the qualification part of a framework or initiative?	<p>This qualification is part of the Automotive Maintenance and Repair Advanced Apprenticeship Framework (framework 1) which will replace current framework 4 from April 2011.</p>
What opportunities for progression are there?	<p>After taking this qualification, candidates will have a qualification that shows employers and customers they have the skills required to remove and replace a variety of tyres and will be able to progress into employment.</p> <p>Candidates may also wish to progress onto the skills based qualification Level 1 Diploma in Tyre Fitting Principles (4291-51).</p> <p>In addition, candidates who enjoy leading teams of people at work could also move onto a qualification as a Team Leader or Supervisor such as qualifications at Levels 2, 3 and 4 through the Institute of Leadership and Management (ILM).</p>

Structure

To achieve the **Level 1 Diploma in Tyre Fitting Competence**, learners must achieve **32** credits. **24** credits must be achieved from the mandatory units and a minimum of **8** units must be achieved from the optional units. Optional units must be taken in pairs, with both the knowledge and the competence unit taken.

Unit accreditation number	City & Guilds unit	Unit title	Credit value
Mandatory			
A/601/6338	001	Competency in health, safety and good housekeeping in the automotive environment	7
F/601/6180	031	Competency in supporting working relationships in the automotive work environment	7
D/601/6171	051	Knowledge of health, safety and good housekeeping in the automotive environment	3
F/601/6180	081	Knowledge to support working relationships in the automotive work environment	3
T/601/6872	544	Competency in receiving and storing stock	7
Y/601/6086	594	Knowledge of receiving and storing stock	4
Optional			
H/601/6091	501	Competency in inspection, repair and replacement of standard light vehicle tyres	8
M/601/6093	503	Competency in inspection repair and replacement of commercial vehicle tyres	8
D/601/6025	551	Knowledge in inspection, repair and replacement of standard light vehicle tyres	8
L/601/6036	553	Knowledge of inspection, repair and replacement of commercial vehicle tyres	3



2 Centre requirements

Approval

If your Centre is approved to offer the Level 1 NVQ in Vehicle Fitting (4101-16) you will be granted automatic approval for the Level 1 Certificate in Tyre Fitting Principles (4290-51) and will be able to make registrations straight away.

For any other cases, centres will need to gain both centre and qualification approval. Please refer to the *Centre Manual - Supporting Customer Excellence* for further information. Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualifications before designing a course programme.

Resource requirements

Physical resources and site agreements

Centres must have access to sufficient equipment in the college, training centre or workplace to ensure candidates have the opportunity to cover all of the practical activities.

Centre staffing

Staff delivering this qualification must be able to demonstrate that they meet the following occupational expertise requirements. They should:

- be occupationally competent or technically knowledgeable in the areas for which they are delivering training and/or have experience of providing training. This knowledge must be to the same level as the training being delivered
- have recent relevant experience in the specific area they will be assessing
- have credible experience of providing training.

Centre staff may undertake more than one role, eg tutor and assessor or internal verifier, but cannot internally verify their own assessments.

Assessors and internal verifiers

All assessors must:

- have sufficient and relevant technical/occupational competence in the unit, at or above the level of the unit being assessed
- have in depth knowledge of the qualification or credit based unit evidence requirements.
- hold or be working towards a relevant assessors' award as specified by the Sector Skills Council. This will include, but not be limited to the Assessor qualifications, Level 3 Award in Understanding the Principles and Practices of Assessment, Level 3 Award in Assessing Competence in the Work Environment, Level 3 Award in Assessing Vocationally

Related Achievement, Level 3 Certificate in Assessing Vocational Achievement. (and by implication legacy Assessor units A1, A2 and D32/33 unit) but may be an appropriate equivalent as defined by the SSC).

- assessors working towards a relevant assessor qualification must achieve their qualification within 12 months.
- demonstrate knowledge and understanding of the competencies that a learner is required to demonstrate for the qualification that they are undertaking
- provide evidence of completing 5 days working/job shadowing in industry within their professional area in a 24 month period.
- provide evidence of 30 hours of technical/qualification related CPD within a 12 month period. (This is in addition to working / job shadowing).

All internal verifiers must:

- have in-depth knowledge of the occupational standards and credit based unit evidence requirements.
- be occupationally aware of the relevant industry sector being internally verified
- hold or be working towards a relevant verifier award as specified by the Sector Skills Council. This will include, but not be limited to the Quality Assurance qualifications Level 4 Award in Understanding the Internal Quality Assurance of Assessment Processes and Practice, Level 4 Award in the Internal Quality Assurance of Assessment Processes and Practice, Level 4 Certificate in Leading the Internal Quality Assurance of Assessment Processes and Practice, (and by implication legacy Internal Verifier unit V1 D34 unit) but may be an appropriate equivalent as defined by the Sector Skills Council.
- achieve their relevant verifier qualification within 12 months.
- provide evidence of CPD totalling not less than 30 hours from within their professional area within a 12 month period.

Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Candidate entry requirements

City & Guilds does not set entry requirements for this qualification. However, centres must ensure that candidates have the potential and opportunity to gain the qualification successfully.

Age restrictions

There is no age restriction for this qualification unless this is a legal requirement of the process or the environment.



3 Delivering the qualification

Initial assessment and induction

An initial assessment of each candidate should be made before the start of their programme to identify:

- if the candidate has any specific training needs,
- support and guidance they may need when working towards their qualifications.
- any units they have already completed, or credit they have accumulated which is relevant to the qualifications.
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the candidate fully understands the requirements of the qualifications, their responsibilities as a candidate, and the responsibilities of the centre. This information can be recorded on a learning contract.

Support materials

City & Guilds will provide the following learning and support resources which will be posted on our website.

www.cityandguilds.com/automotive

- Practical Assessment workbook
- Centre Handbook

Recording documents

Candidates and centres may decide to use a paper-based or electronic method of recording evidence. To support the delivery of vocational qualifications we offer our own ePortfolio, Learning Assistant, an easy to use and secure online tool to support and evidence candidates' progress towards achieving qualifications. Further details are available at:

www.cityandguilds.com/eportfolios.

City & Guilds has developed training and assessment documentation specifically for these qualifications which are available from City & Guilds website. Although new centres are expected to use these forms, centres may devise or customise alternative forms, which must be approved for use by the external verifier, before they are used by candidates and assessors at the centre.

Health and safety

The requirement to follow safe working practices is an integral part of all City & Guilds qualifications and assessments, and it is the responsibility of centres to ensure that all relevant health and safety requirements are in place before candidates start practical assessments.

Should a candidate fail to follow health and safety practice and procedures during an assessment, the assessment must be stopped. The candidate should be informed that they have not reached the standard required to successfully pass the assessment and told the reason why. Candidates may retake the assessment at a later date, at the discretion of the centre. In case of any doubt, guidance should be sought from the external verifier.

Data protection and confidentiality

Centres offering this qualification may need to provide City & Guilds with personal data for staff and candidates. Guidance on data protection and the obligations of City & Guilds and centres are explained in *Centre Manual - Supporting Customer Excellence*.

Equal opportunities

It is a requirement of centre approval that centres have an equal opportunities policy (see *Centre Manual - Supporting Customer Excellence*). The regulatory authorities require City & Guilds to monitor centres to ensure that equal opportunity policies are being followed.

The City & Guilds equal opportunities policy is set out on the City & Guilds website, in *Centre Manual - Supporting Customer Excellence*, and is also available from the City & Guilds Customer Relations department.

Access to qualifications on the Qualifications Credit Framework is open to all, irrespective of gender, race, creed, age or special needs. The centre co-ordinator should ensure that no candidate is subject to unfair discrimination on any ground in relation to access to assessment and the fairness of the assessment.

Access to assessment

City & Guilds' guidance and regulations on access to assessment are designed to facilitate access to assessments and qualifications for candidates who are eligible for adjustments to assessment arrangements. Access arrangements are designed to allow attainment to be demonstrated. For further information, please see *Access to assessment and qualifications*, available on the City & Guilds website.

Appeals

Centres must have their own, auditable, appeals procedure that must be explained to candidates during their induction. Appeals must be fully documented by the quality assurance co-ordinator and made available to the external verifier or City & Guilds.

Further information on appeals is given in *Centre Manual - Supporting Customer Excellence*. There is also information on appeals for centres and learners on the City & Guilds website or available from the Customer Relations department.



4 Assessment

Assessment of the qualification

Candidates must complete one of the below as listed

- Online multiple choice tests graded as Pass, Merit, Distinction
- A portfolio of evidence
- Centre marked short answer paper

Full details of the assessment requirements and the assessment strategy relating to these qualifications can be obtained directly from the Institute of the Motor Industry (IMI) <http://www.motor.org.uk>

Time constraints

There are no time constraints applied to the assessment of this qualification. If centres have queries regarding the length of time required to complete a particular task, they should contact their external verifier in the first instance who will advise accordingly and feed this information back to City & Guilds where appropriate.

Recognition of prior learning (RPL)

Proxy units / credit transfer

Learners transferring from City & Guilds 4101 NQF qualifications or from another awarding organisation may be exempt from taking the 4290/4270/4291/4271 online multiple choice tests, on production of a valid certificate of equivalent units achieved. Proxy units are available in these circumstances. Please note that a certificate of unit credit (CUC) is not available when claiming a proxy unit. For more information on credit transfer please refer to our 9420 Automotive Apprenticeship Framework centre guide available from www.cityandguilds.com

Test specifications

Summary test specifications for all 4270 online tests can be found in the *Automotive online test specifications* document, downloadable from the 4270 website.

Level 1 Diploma in Tyre Fitting Competence

Unit	Level	Unit title	Credit value	Assessment method
001	2	Competency in health, safety and good housekeeping in the automotive environment	7	Portfolio
031	1	Competency in supporting working relationships in the automotive work environment	7	Portfolio

Unit	Level	Unit title	Credit value	Assessment method
051	1	Knowledge of health, safety and good housekeeping in the automotive environment	3	Multiple Choice
081	1	Knowledge to support working relationships in the automotive work environment	3	Short Answer Paper
544	1	Competency in receiving and storing stock	7	Portfolio
503	1	Competency in inspection repair and replacement of commercial vehicle tyres	8	Portfolio
501	1	Competency in inspection, repair and replacement of standard light vehicle tyres	8	Portfolio
551	1	Knowledge of inspection, repair and replacement of standard light vehicle tyres	3	Multiple Choice
553	1	Knowledge in inspection, repair and replacement of commercial vehicle tyres	3	Multiple Choice
594	1	Knowledge of receiving and storing stock	4	Assignment



5 Units

Availability of units

Below is a list of the learning outcomes for all the units.

Structure of units

These units each have the following:

- City & Guilds reference number
- unit accreditation number (UAN)
- title
- level
- credit value
- unit aim
- relationship to NOS
- learning outcomes which are comprised of a number of assessment criteria
- unit range.

Unit 001

Competency in health, safety and good housekeeping in the automotive environment

UAN:	A/601/6338
Level:	2
Credit value:	7
GLH:	60
Relationship to NOS:	This unit is linked to G1 Contribute to Housekeeping in Motor Vehicle Environment and G2 Reduce Risks to Health and Safety in the Motor Vehicle Environment.
Endorsement by a sector or regulatory body:	This unit was developed by the IMI, the sector skills council for the automotive retail industry.
Aim:	<p>This unit will enable the learner to develop the skills required to:</p> <ul style="list-style-type: none">• carry out day to day work area cleaning, clearing away, dealing with spillages and disposal of waste, used materials and debris.• identify hazards and risks in the automotive environment and complying with relevant legislation and good practice.• work safely at all times within the automotive environment, both as an individual and with others.

Learning outcome	The learner will:
1.	be able to use correct personal and vehicle protection within the automotive work environment
Assessment criteria	
The learner can:	
1.1	select and use personal protective equipment throughout activities. To include appropriate protection of: <ul style="list-style-type: none">a. eyesb. earsc. headd. skine. feetf. handsg. lungs
1.2	select and use vehicle protective equipment throughout all activities.

Learning outcome	The learner will:
2.	be able to carry out effective housekeeping practices in the automotive work environment
Assessment criteria	
The learner can:	
2.1	select and use cleaning equipment which is of the right type and suitable for the task
2.2	use utilities and appropriate consumables, avoiding waste
2.3	use materials and equipment to carry out cleaning and maintenance duties in allocated work areas, following automotive work environment policies, schedules and manufacturers' instructions
2.4	perform housekeeping activities safely and in a way which minimizes inconvenience to customers and staff
2.5	keep the work area clean and free from debris and waste materials
2.6	keep tools and equipment fit for purpose by regular cleaning and keeping tidy
2.7	dispose of used cleaning agents, waste materials and debris to comply with legal and workplace requirements.

Learning outcome	The learner will:
3.	be able to recognise and deal with dangers in order to work safely within the automotive workplace
Assessment criteria	
The learner can:	
3.1	name and locate the responsible persons for health and safety in their relevant workplace
3.2	identify and report working practices and hazards which could be harmful to themselves or others
3.3	carry out safe working practices whilst working with equipment, materials and products in the automotive environment
3.4	rectify health and safety risks encountered at work, within the scope and capability of their job role.

Learning outcome	The learner will:
4.	be able to conduct themselves responsibly
Assessment criteria	
The learner can:	
4.1	show personal conduct in the workplace which does not endanger the health and safety of themselves or others
4.2	display suitable personal presentation at work which ensures the health and safety of themselves and others at work.

Unit 001

Competency in health, safety and good housekeeping in the automotive environment

Evidence requirements

The evidence requirements are shown in full in the assessment documentation.

Unit 031

Competency in supporting working relationships in the automotive work environment

UAN:	L/601/6375
Level:	1
Credit value:	7
GLH:	60
Relationship to NOS:	This unit is linked to G3 Maintain Working Relationships in the Motor Vehicle Environment.
Endorsement by a sector or regulatory body:	This unit was developed by the IMI, the sector skills council for the automotive retail industry.
Aim:	This unit will help the learner develop the skills required to keep good working relationships with all colleagues and customers in the automotive work environment by using effective communication and support.

Learning outcome	The learner will:
1.	be able to work effectively within the organisational structure of the automotive work environment
Assessment criteria	
The learner can	
1.1	demonstrate a prompt and willing response to requests from customers and colleagues in the work environment
1.2	refer customers and colleagues to the correct person should requests fall outside their responsibility and capability.

Learning outcome	The learner will:
2.	be able to obtain and use information in order to support their job role within the automotive work environment
Assessment criteria	
The learner can	
2.1	identify, locate and use relevant information, in an automotive work environment.

Learning outcome	The learner will:
3.	be able to communicate with and support colleagues and customers within the automotive work environment
Assessment criteria	
The learner can	
3.1	use methods of communication with customers and colleagues which meet their needs
3.2	give customers and colleagues accurate information
3.3	communicate with customers and colleagues clearly and courteously
3.4	report any possible delays to the relevant persons promptly.

Learning outcome	The learner will:
4.	be able to demonstrate good working relationships in the automotive work environment
Assessment criteria	
The learner can	
4.1	demonstrate positive team work within an automotive environment
4.2	treat customers and colleagues in a way which shows respect for their views and opinions
4.3	make and keep achievable commitments to customers and colleagues
4.4	identify and inform colleagues promptly of anything likely to affect their own work.

Unit 031

Competency in supporting working relationships in the automotive work environment

Evidence requirements

The evidence requirements are shown in full in the assessment documentation.

Unit 051

Knowledge of health, safety and good housekeeping in the automotive environment

UAN:	D/601/6171
Level:	2
Credit value:	3
GLH:	30
Relationship to NOS:	This unit is linked to G1 Contribute to Housekeeping in Motor Vehicle Environment and G2 Reduce Risks to Health and Safety in the Motor Vehicle Environment.
Endorsement by a sector or regulatory body:	This unit was developed by the IMI, the sector skills council for the automotive retail industry.
Aim:	<p>This unit enables the learner to develop an understanding of:</p> <ul style="list-style-type: none">• routine maintenance and cleaning of the automotive environment and using resources economically• health and safety legislation and duties of everyone in the motor vehicle environment. It will provide an appreciation of significant risks in the automotive environment and how to identify and deal with them. Once completed the learner will be able to identify hazards and evaluate and reduce risk.

Learning outcome	The learner will:
1.	understand the correct personal and vehicle protective equipment to be used within the automotive environment
Assessment criteria	
The learner can	
1.1	explain the importance of wearing the types of PPE required for a range of automotive repair activities
1.2	identify vehicle protective equipment for a range of repair activities
1.3	describe vehicle and personal safety considerations when working at the roadside.

Learning outcome	The learner will:
2.	understand effective housekeeping practices in the automotive environment
Assessment criteria	
The learner can	
2.1	describe why the automotive environment should be properly cleaned and maintained
2.2	describe requirements and systems which may be put in place to ensure a clean automotive environment
2.3	describe how to minimise waste when using utilities and consumables
2.4	state the procedures and precautions necessary when cleaning and maintaining an automotive environment
2.5	describe the selection and use of cleaning equipment when dealing with general cleaning, spillages and leaks in the automotive environment
2.6	describe procedures for correct disposal of waste materials from an automotive environment
2.7	describe procedures for starting and ending the working day which ensure effective housekeeping practices are followed.

Learning outcome	The learner will:
3.	understand key health and safety requirements relevant to the automotive environment
Assessment criteria	
The learner can	
3.1	list the main legislation relating to automotive environment health and safety
3.2	describe the general legal duties of employers and employees required by current health and safety legislation
3.3	describe key, current health and safety requirements relating to the automotive environment
3.4	describe why workplace policies and procedures relating to health and safety are important.

Learning outcome	The learner will:
4.	understand about hazards and potential risks relevant to the automotive environment
Assessment criteria	
The learner can	
4.1	identify key hazards and risks in an automotive environment
4.2	describe policies and procedures for reporting hazards, risks, health and safety matters in the automotive environment
4.3	state precautions and procedures which need to be taken when working with vehicles, associated materials, tools and equipment
4.4	identify fire extinguishers in common use and which types of fire they should be used on
4.5	identify key warning signs and their characteristics that are found in the vehicle repair environment
4.6	state the meaning of common product warning labels used in an automotive environment.

Learning outcome	The learner will:
5.	understand personal responsibilities
Assessment criteria	
The learner can	
5.1	explain the importance of personal conduct in maintaining the health and safety of the individual and others
5.2	explain the importance of personal presentation in maintaining health safety and welfare.

Unit 051 Knowledge of health, safety and good housekeeping in the automotive environment

Supporting information

Candidates will be assessed on the assessment criteria as specified within the unit. The following information has been provided by IMI SSC and is included to support centres in terms of teaching and delivery.

Economic use of resources

- a. Consumable materials eg grease, oils, split pins, locking and fastening devices

Requirement to maintain work area effectively

- a. Cleaning tools and equipment to maximise workplace efficiency.
- b. Requirement to carry out the housekeeping activities safely and in a way that minimises inconvenience to customers and staff.
- c. Risks involved when using solvents and detergents.
- d. Advantages of good housekeeping.

Spillages, leaks and waste materials

- a. Relevance of safe systems of work to the storage and disposal of waste materials.
- b. Requirement to store and dispose of waste, used materials and debris correctly.
- c. Safe disposal of special / hazardous waste materials.
- d. Advantages of recycling waste materials.
- e. Dealing with spillages and leaks.

Basic legislative requirements

- a. Provision and Use of Work Equipment Regulations 1992.
- b. Power Presses Regulations 1992.
- c. Pressure Systems and Transportable Gas Containers Regulations 1989.
- d. Electricity at Work Regulations 1989.
- e. Noise at Work Regulations 1989.
- f. Manual Handling Operations Regulations 1992.
- g. Health and Safety (Display Screen Equipment) Regulations 1992.
- h. Abrasive Wheel Regulations.
- i. Safe Working Loads.
- j. Working at Height Regulations.

Routine maintenance of the workplace

- a. Trainee's personal responsibilities and limits of their authority with regard to work equipment.

- b. Risk assessment of the workplace activities and work equipment.
- c. Workplace person responsible for training and maintenance of workplace equipment.
- d. When and why safety equipment must be used.
- e. Location of safety equipment.
- f. Particular hazards associated with their work area and equipment.
- g. Prohibited areas.
- h. Plant and machinery that trainees must not use or operate.
- i. Why and how faults on unsafe equipment should be reported.
- j. Storing tools, equipment and products safely and appropriately.
- k. Using the correct PPE.
- l. Following manufacturers' recommendations.
- m. Location of routine maintenance information e.g. electrical safety check log.

Legislation relevant to Health and Safety

- a. HASAWA.
- b. COSHH.
- c. EPA.
- d. Manual Handling Operations Regulations 1992.
- e. PPE Regulations 1992.

General regulations to include an awareness of:

- a. Health and Safety (Display Screen Equipment) Regulations 1992.
- b. Health and Safety (First Aid) Regulations 1981.
- c. Health and Safety (Safety Signs and Signals) Regulations 1996.
- d. Health and Safety (Consultation with Employees) Regulations 1996.
- e. Employers Liability (Compulsory Insurance) Act 1969 and Regulations 1998.
- f. Confined Spaces Regulations 1997.
- g. Noise at Work Regulations 1989.
- h. Electricity at Work Regulations 1989.
- i. Electricity (Safety) Regulations 1994.
- j. Fire Precautions Act 1971.
- k. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1985.
- l. Pressure Systems Safety Regulations 2000.
- m. Waste Management 1991.
- n. Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) 2002.
- o. Control of Asbestos at Work Regulations 2002.

Legislative duties

- a. The purpose of a Health and Safety Policy.
- b. The relevance of the Health and Safety Executive.
- c. The relevance of an initial induction to Health and Safety requirements at your workplace.
- d. General employee responsibilities under the HASAWA and the consequences of non-compliance.
- e. General employer responsibilities under the HASAWA and the consequences of non-compliance.

- f. The limits of authority with regard to Health and Safety within a personal job role.
- g. Workplace procedure to be followed to report Health and Safety matters.

Precautions to be taken when working with vehicles, workshop materials, tools and equipment including electrical safety, pneumatics and hydraulics

- a. Accessing and interpreting safety information.
- b. Seeking advice when needed.
- c. Seeking assistance when required.
- d. Reporting of unsafe equipment.
- e. Storing tools, equipment and products safely and appropriately.
- f. Using the correct PPE.
- g. Following manufacturers' recommendations.
- h. Following application procedures e.g. hazardous substances.
- i. The correct selection and use of extraction equipment.

PPE to include:

- a. Typical maintenance procedures for PPE equipment to include:
 - i. typical maintenance log
 - ii. cleaning procedures
 - iii. filter maintenance
 - iv. variation in glove types
 - v. air quality checks.
- b. Choice and fitting procedures for masks and air breathing equipment.
- c. Typical workplace processes which would require the use of PPE to include:
 - i. welding
 - ii. sanding and grinding
 - iii. filling
 - iv. panel removal and replacement
 - v. drilling
 - vi. cutting
 - vii. chiselling
 - viii. removal of broken glass
 - ix. removal of rubber seals from fire damaged vehicles
 - x. removal of hypodermic needles
 - xi. servicing activities
 - xii. roadside recovery.
- d. Unserviceable PPE.
- e. PPE required for a range automotive repair activities. To include appropriate protection of:
 - i. eyes
 - ii. ears
 - iii. head
 - iv. skin
 - v. feet
 - vi. hands
 - vii. lungs.

Fire and extinguishers

- a. Classification of fire types.
- b. Using a fire extinguisher effectively.
- c. Types of extinguishers:
 - i. foam
 - ii. dry powder
 - iii. CO2
 - iv. water
 - v. fire blanket.

Action to be taken in the event of a fire to include:

- a. the procedure as:
 - i. raise the alarm
 - ii. fight fire only if appropriate
 - iii. evacuate building
 - iv. call for assistance.

Product warning labels to include:

- a. reasons for placing warning labels on containers.
- b. warning labels in common use:
 - i. toxic
 - ii. corrosive
 - iii. poisonous
 - iv. harmful
 - v. irritant
 - vi. flammable
 - vii. explosive.

Warning signs and notices

- a. Colours used for warning signs:
 - i. red
 - ii. blue
 - iii. green.
- b. Shapes and meaning of warning signs:
 - i. round
 - ii. triangular
 - iii. square.
- c. The meaning of prohibitive warning signs in common use.
- d. The meaning of mandatory warning signs in common use.
- e. The meaning of warning notices in common use.
- f. General design of safe place warning signs.

Hazards and risks to include:

- a. The difference between a risk and a hazard.
- b. Potential risks resulting from:
 - i. the use and maintenance of machinery or equipment
 - ii. the use of materials or substances
 - iii. accidental breakages and spillages
 - iv. unsafe behaviour
 - v. working practices that do not conform to laid down policies

- vi. environmental factors
 - vii. personal presentation
 - viii. unauthorised personnel, customers, contractors etc entering the work premises
 - ix. working by the roadside
 - x. vehicle recovery.
- c. The employee's responsibilities in identifying and reporting risks within their working environment.
 - d. The method of reporting risks that is outside own limits of authority.
 - e. Potential causes of:
 - i. fire
 - ii. explosion
 - iii. noise
 - iv. harmful fumes
 - v. slips
 - vi. trips
 - vii. falling objects
 - viii. accidents whilst dealing with broken down vehicles.

Personal responsibilities

- a. The purpose of workplace policies and procedures on:
 - i. the use of safe working methods and equipment
 - ii. the safe use of hazardous substances
 - iii. smoking, eating , drinking and drugs
 - iv. emergency procedures
 - v. personal appearance.
- b. The importance of personal appearance in the control of health and safety.

Action to be taken in the event of colleagues suffering accidents

- a. The typical sequence of events following the discovery of an accident such as:
 - i. make the area safe
 - ii. remove hazards if appropriate i.e. switch off power
 - iii. administer minor first aid
 - iv. take appropriate action to re-assure the injured party
 - v. raise the alarm
 - vi. get help
 - vii. report on the accident.
- b. Typical examples of first aid which can be administered by persons at the scene of an accident:
 - i. check for consciousness
 - ii. stem bleeding
 - iii. keep the injured person's airways free
 - iv. place in the recovery position if injured person is unconscious
 - v. issue plasters for minor cuts
 - vi. action to prevent shock i.e. keep the injured party warm
 - vii. administer water for minor burns or chemical injuries
 - viii. wash eyes with water to remove dust or ingress of chemicals (battery acid)
 - ix. need to seek professional help for serious injuries.
- c. Examples of bad practice which may result in further injury such as:

- i. moving the injured party
- ii. removing foreign objects from wounds or eyes
- iii. inducing vomiting
- iv. straightening deformed limbs.

Unit 081

Knowledge to support working relationships in the automotive work environment

UAN:	F/601/6180
Level:	1
Credit value:	3
GLH:	28
Relationship to NOS:	This unit is linked to G3 Maintain Working Relationships in the Motor Vehicle Environment.
Endorsement by a sector or regulatory body	This unit was developed by the IMI, the sector skills council for the automotive retail industry.
Aim	This unit enables the learner to develop an understanding of how to keep good working relationships with all colleagues in the automotive work environment by using effective communication and support skills.

Learning outcome	The learner will:
1.	know key organisational structures, functions and roles within the automotive work environment
Assessment criteria	
The learner can:	
1.1	list the main sections which may be found within a typical automotive work environment
1.2	outline typical organisational structures and lines of communication within an automotive work environment. To include: a. non franchised dealer b. franchised dealer
1.3	state typical levels of responsibility within specific job roles in an automotive work environment. To include a: a. trainee b. skilled technician c. supervisor.

Learning outcome	The learner will:
2.	know the importance of obtaining, interpreting and using information in order to support their job role within the automotive work environment
Assessment criteria	
The learner can:	
2.1	give examples of different sources of information and when they would be used within the automotive environment
2.2	give examples of the legal requirements relating to the use of a vehicle on the road, including safety requirements
2.3	state the importance of obtaining correct information and working to recognised procedures and processes
2.4	give examples of when replacement units and components must meet the original equipment specification
2.5	give examples of identification codes and how they are used.

Learning outcome	The learner will:
3.	know where different types of communication within the automotive work environment can be used
Assessment criteria	
The learner can:	
3.1	give examples of alternative methods of communication and where they could be used within the automotive environment.

Learning outcome	The learner will:
4.	know communication requirements when carrying out vehicle repairs in the automotive work environment
Assessment criteria	
The learner can:	
4.1	give examples of when it is important to communicate with a supervisor whilst carrying out repairs in the automotive environment
4.2	state the importance of keeping records of vehicle repair information
4.3	state why it is important to work to agreed timescales.

Learning outcome	The learner will:
5.	know how to develop good working relationships with colleagues and customers in the automotive workplace
Assessment criteria	
The learner can:	
5.1	outline how to develop positive working relationships with colleagues and customers
5.2	give examples of why it is important to accept other peoples' views and opinions within the workplace
5.3	state why it is important to make and honour realistic commitments to colleagues and customers.

Unit 081 Knowledge to support working relationships in the automotive work environment

Supporting information

Candidates will be assessed on the assessment criteria as specified within the unit. The following information has been provided by IMI SSC and is included to support centres in terms of teaching and delivery.

Sections within a typical vehicle repair business

- a. Reception.
- b. Body shop.
- c. Service repair workshop.
- d. Valeting.
- e. Parts.
- f. Sales.
- g. Administration.

Different sources of information in an automotive work environment.

- a. Other staff.
- b. Manuals.
- c. Parts list.
- d. Computer software / internet.
- e. Manufacturer.
- f. Diagnostic equipment.

Locating and using correct documentation and information for:

- a. Recording vehicle maintenance and repairs.
- b. Vehicle specifications.
- c. Component specifications.
- d. Oil and fluid specifications.
- e. Equipment and tools.
- f. Identification codes.

Alternative methods of communication

- a. Verbal.
- b. Signs and notices.
- c. Memos.
- d. Telephone.
- e. Electronic mail.
- f. Vehicle job card.
- g. Notice boards.
- h. SMS text messaging.

Communication with a supervisor

- a. Referral of problems.
- b. Reporting delays.
- c. Additional work identified during repair or maintenance.
- d. Keep others informed of progress.

Agreed timescales

- a. Relationship between time and cost.
- b. Customer expectation.

Unit 501

Competency in inspection, repair and replacement of standard light vehicle tyres

UAN:	J/601/5001
Level:	1
Credit value:	8
GLH:	72
Relationship to NOS:	This unit is linked to VF01C Demonstrating Competency in Inspection, Repair and Replacement of Standard Light Vehicle Tyres.
Endorsement by a sector or regulatory body:	This unit was developed by the IMI, the sector skills council for the automotive retail industry. All assessments have been developed in accordance with the IMI Assessment Requirements for VRQs.
Aim:	This unit will help the learner to develop the skills required to inspect, fit, repair and maintain standard light vehicle tyres.

Learning outcome	The learner will:
1.	be able to work safely when carrying out removal and replacement activities
Assessment criteria	
The learner can:	
1.1	use suitable personal protective equipment and vehicle coverings when working on vehicles
1.2	work in a way which minimises the risk of damage or injury to the vehicle, people and the environment.

Learning outcome	The learner will:
2.	be able to use light vehicle tyre inspection techniques
Assessment criteria	
The learner can:	
2.1	carry out inspection of wheels and tyres using appropriate techniques, suitable tools, equipment and manufacturers instructions where relevant. To include:
a.	visual inspection
b.	measurement of tread depth
c.	tyre pressures
d.	balance.

Learning outcome	The learner will:
3.	be able to carry out the repair and replacement of standard light vehicle tyres
Assessment criteria	
The learner can:	
3.1	carry out tyre repair activities within appropriate timescales, using: <ul style="list-style-type: none"> a. suitable tools and equipment b. correct repair and replacement techniques c. correct type and size of replacement components d. correct materials
3.2	carry out tyre replacement activities within appropriate timescales.

Learning outcome	The learner will:
4.	be able to balance wheels and carry out final checks on the vehicle
Assessment criteria	
The learner can:	
4.1	carry out wheel balancing to within acceptable limits
4.2	carry out final vehicle safety checks in the workshop, prior to releasing the vehicle to the customer.
4.3	Complete all activities within the agreed timescale

Learning outcome	The learner will:
5.	be able to record information and make suitable recommendations
Assessment criteria	
The learner can:	
5.1	produce work records that are accurate, complete and passed to the relevant person(s) promptly in the format required
5.2	make suitable and justifiable recommendations for cost effective repairs
5.3	record and report any additional faults noticed during the course of their work promptly in the format required.

Unit 501

Competency in inspection, repair and replacement of standard light vehicle tyres

Evidence requirements

The evidence requirements are shown in full in the assessment documentation.

Unit 503

Competency in inspection repair and replacement of commercial vehicle tyres

UAN:	Y/601/5004
Level:	1
Credit value:	8
GLH:	72
Relationship to NOS:	This unit is linked to VF03C Demonstrating Competency in Inspection, Repair and Replacement of Commercial Vehicle Tyres
Endorsement by a sector or regulatory body:	This unit was developed by the IMI, the sector skills council for the automotive retail industry.
Aim:	This unit will help the learner to develop the skills required to inspect, fit, repair and maintain tyres on medium and large commercial vehicles (3500kg gross vehicle mass and above).

Learning outcome	The learner will:
1.	be able to work safely when carrying out removal and replacement activities
Assessment criteria	
The learner can:	
1.1	use suitable personal protective equipment and vehicle coverings when working on vehicles
1.2	work in a way which minimises the risk of damage or injury to the vehicle, people and the environment.

Learning outcome	The learner will:
2.	be able to inspect commercial vehicle wheels and tyres
Assessment criteria	
The learner can:	
2.1	inspect commercial vehicle wheels and tyres using appropriate techniques, suitable tools, equipment, technical information and manufacturers instructions where relevant. To include:
	a. visual inspection
	b. measurement of tread depth
	c. tyre pressures.

Learning outcome	The learner will:
3.	be able to carry out the repair and replacement of commercial vehicle tyres, wheels and tubes
Assessment criteria	
The learner can:	
3.1	carry out tyre repair activities within appropriate timescales using: <ul style="list-style-type: none"> a. suitable tools and equipment b. correct repair techniques c. correct type and size of replacement components d. correct materials
3.2	carry out tyre replacement activities within appropriate timescales
3.3	carry out final checks to ensure that replaced and refitted tyres and valves are correctly fitted and conform to legal requirements prior to releasing the vehicle to the customer.

Learning outcome	The learner will:
4.	be able to carry out tread regrooving on commercial vehicle tyres
Assessment criteria	
The learner can:	
4.1	carry out tread re-grooving on suitable tyres, complying with legal requirements using: <ul style="list-style-type: none"> a. suitable tools and equipment b. correct re-grooving techniques c. suitable personal protection
4.2	carry out final checks to ensure that re-grooved tyres meet manufacturer's and legal requirements prior to release to the customer.

Learning outcome	The learner will:
5.	be able to record information and make suitable recommendations
Assessment criteria	
The learner can:	
5.1	produce work records that are accurate, complete and passed to the relevant person(s) promptly in the format required
5.2	make suitable and justifiable recommendations for cost effective repairs
5.3	record and report any additional faults noticed during the course of their work promptly in the format required.

Unit 503

Competency in inspection repair and replacement of commercial vehicle tyres

Evidence requirements

The evidence requirements are shown in full in the assessment documentation.

Unit 544

Competency in receiving and storing stock

UAN:	A/601/7389
Level:	1
Credit value:	7
GLH:	60
Relationship to NOS:	This unit is linked to VF44C Demonstrating Competency in Receiving and Storing Stock
Endorsement by a sector or regulatory body:	This unit was developed by the IMI, the sector skills council for the automotive retail industry.
Aim:	This unit will help the learner to develop the skills required to: <ul style="list-style-type: none">• receive parts into storage• put them into the required location• update stock control systems• complete documentation in a dealership, fast fit centre, parts distribution centre or similar situation

Learning outcome	The learner will:
1.	be able to accept parts deliveries
Assessment criteria	
The learner can:	
1.1	ensure that parts delivered conform to the type, quality and quantity expected
1.2	report any discrepancies in deliveries and storage to the relevant person promptly
1.3	identify and use location systems and place parts in the appropriate location for storage
1.4	store parts in a way that makes the best use of the space available and conforms to relevant regulations and practice and conforms with stock rotation requirements
1.5	follow relevant safe working practices associated with receiving of parts and the storage of parts.

Learning outcome	The learner will:
2.	be able to deal with stock control systems and documentation
Assessment criteria	
The learner can:	
2.1	record details of stock received accurately
2.2	complete storage documentation accurately.

Evidence requirements

The evidence requirements are shown in full in the assessment documentation.

Unit 551

Knowledge in inspection, repair and replacement of standard light vehicle tyres

UAN:	D/601/6025
Level:	1
Credit value:	3
GLH:	24
Relationship to NOS:	This unit is linked to VF02K Knowledge of Inspection, Repair and Replacement of High Performance Light Vehicle Tyres.
Endorsement by a sector or regulatory body:	This unit was developed by the IMI, the sector skills council for the automotive retail industry.
Aim:	This unit will help the learner to develop an understanding of inspecting, fitting, repairing and maintaining standard light vehicle tyres and wheels.

Learning outcome	The learner will:
1.	know about light vehicle standard tyre's legislation and special workplace procedures
Assessment criteria	
The learner can:	
1.1	state the main purpose of tyres
1.2	identify the different types of standard light vehicle wheel and rim construction
1.3	identify the types and application of light vehicle tyre construction
1.4	state the legal requirements for light vehicle tyres
1.5	state the relevant parts of the British and European Standard for the repair of light vehicle tyres
1.6	give examples of how to deal with specialist waste materials in their workplace.

Learning outcome	The learner will:
2.	know about materials used in the repair of light vehicle tyres
Assessment criteria	
The learner can:	
2.1	list and name the tools and equipment used when working with light vehicle tyres. To include: <ul style="list-style-type: none"> a. lifting and supporting equipment b. tyre fitting and removal tools and machinery c. hand tools d. tyre repair tools e. measuring equipment f. wheel balancing equipment g. tyre inflation equipment
2.2	give examples of how to select, prepare and use the equipment. To include the need for accurate calibration
2.3	state specialist maintenance requirements of wheel balancing and tyre removal and refitting machinery

Learning outcome	The learner will:
3.	know about the inspection, removal and replacement of light vehicle tyres
Assessment criteria	
The learner can:	
3.1	state the types of repair materials available. To include: <ul style="list-style-type: none"> a. rubber only plug patch b. rubber only patch and filler material c. solutions and chemicals.
3.2	give examples of when and how repair materials should be used

Learning outcome	The learner will:
4.	know about the tools and equipment used when working with light vehicle tyres
Assessment criteria	
The learner can:	
4.1	list the tools and equipment used when working with standard light vehicle tyres
4.2	state specialist maintenance requirements of wheel balancing and tyre removal and refitting machinery.

Unit 551 Knowledge in inspection, repair and replacement of standard light vehicle tyres

Supporting information

Candidates will be assessed on the assessment criteria as specified within the unit. The following information has been provided by IMI SSC and is included to support centres in terms of teaching and delivery.

Types of tyre construction to include:

- a. Directional tread
- b. Asymmetric tread
- c. Composite tread
- d. High speed ratings (V,W,Y or ZR ratings)
- e. An aspect ratio of 55% or below
- f. Run flat capability

Main purpose of tyres

- a. Interaction between tyres, other components and vehicle handling.
- b. Steering, drive and suspension.
- c. Passenger comfort.

Types of standard light vehicle wheel and rim construction

- a. Light alloy, pressed steel and wire wheels.
- b. Standard and safety rims.
- c. Asymmetric rims
- d. Space saver rims

Markings on standard light vehicle tyres

- a. Speed rating.
- b. Size Markings.
- c. Aspect ratio.
- d. Load handling.
- e. Ply rating.
- f. Tread wear indicators.
- g. EC markings and specialist application markings e.g. 'M&S'.

Inspection and fault identification methods and procedures

- a. Inspection:
 - i. on the rim visual (external)
 - ii. removed from wheel (internal).
- b. Use of tread depth indicators, tyre probes and pressure gauges.
- c. Information sources including tyre and vehicle manufacturers' technical data.

Limits of standard light vehicle tyre wear and serviceability

- a. Tread depth and tyre damage.
- b. Limitations under BS159 and Construction & Use Regulations.
- c. Tyre pressure and maintenance requirements.
- d. Suitability for minor repairs.

Common faults associated with standard light vehicle tyres and wheels

- a. Excessive tyre wear and abnormal tread wear patterns (centre, outer edges, worn patches).
- b. Damage to tread or side walls.
- c. Bulging, separation of tread, carcass distortion.
- d. Impact damage, wheels running out of true, buckled wheels.
- e. Incorrect tyre pressure.
- f. Wrong tyre for vehicle or run flat.

Methods and materials used in the repair of standard light vehicle tyres

- a. Tyre inspection.
- b. Damage limitation.
- c. Accurate measurement.
- d. Repair techniques and methods:
 - i. preparation of tyre
 - ii. mechanical and chemical buffing.
- e. Repair materials:
 - i. plug patch
 - ii. patch and filler
 - iii. solutions and chemicals.
- f. Economic use of materials.
- g. Correct storage of materials (including shelf life).

Tools and equipment used to include:

- a. Lifting and supporting equipment.
- b. Tyre fitting and removal tools and machinery.
- c. Hand tools.
- d. Tyre repair tools.
- e. Measuring equipment.
- f. Wheel balancing equipment.
- g. Tyre inflation equipment.

Principles of interchanging tyres/wheels

- a. Over sizing tyre/wheel fitment.
- b. Longitudinal and diagonal mixing radial, cross-ply and bias-belted Tyres on same axle or different axles.

Removal and fitting methods to include:

- a. Tyre sidewall fitting instructions.
- b. Vehicle protection.
- c. Use of hand and impact tools.
- d. Correct tyre inflation.
- e. Final inspection.

Dealing with waste materials including:

- a. Scrapped tyres.
- b. Repair materials.
- c. Wheel weights.

Legal requirements to include:

- a. Tread depth.
- b. Tyre wall and casing damage.
- c. Tyre pressure.
- d. Mixing of tyre types.
- e. correct fitting.

Unit 553

Knowledge of inspection, repair and replacement of commercial vehicle tyres

UAN:	L/601/6036
Level:	1
Credit value:	3
GLH:	26
Relationship to NOS:	This unit is linked to VF03K Knowledge of Inspection, Repair and Replacement of Commercial Vehicle Tyres
Endorsement by a sector or regulatory body:	This unit was developed by the IMI, the sector skills council for the automotive retail industry.
Aim:	This unit enables the learner to develop and understanding of inspecting, fitting, repairing and maintaining tyres on medium and large commercial vehicles (3500kg gross vehicle mass and above).

Learning outcome	The learner will:
1.	understand commercial vehicle wheel and tyre construction, legislation and special workplace procedures
Assessment criteria	
The learner can:	
1.1	state the purpose, function and construction of commercial vehicle wheels and tyres
1.2	state the current legal requirements for commercial vehicle tyres
1.3	state the relevant parts of the prevailing British and European Standard for the repair of commercial vehicle tyres
1.4	give examples of how to deal with specialist waste materials in their workplace
1.5	outline manufacturers' recommendations on the 'repairability' of their tyres.

Learning outcome	The learner will:
2.	understand the tools and equipment used when working with commercial vehicle tyres
Assessment criteria	
The learner can:	
2.1	give examples of how to select, prepare and use tools and equipment appropriate to working with commercial vehicle tyres
2.2	state specialist maintenance requirements of commercial vehicle wheel and tyre removal and refitting machinery.

Learning outcome	The learner will:
3.	understand the construction of, and the materials used in the manufacture and repair of commercial vehicle tyres
Assessment criteria	
The learner can:	
3.1	state the types of repair materials available and when they should be used
3.2	state the difference between a 'remould' and a 'recut' when applied to commercial vehicle tyre.

Learning outcome	The learner will:
4.	understand how to inspect, remove, repair and replace of commercial vehicle tyres
Assessment criteria	
The learner can:	
4.1	state the different types of commercial vehicle tyre valve and their installation techniques
4.2	state the meaning of markings on commercial vehicle tyres and where these can be found
4.3	state the inspection and fault identification methods and procedures associated with commercial vehicle tyres
4.4	give examples of the common faults associated with commercial vehicle tyres and wheels
4.5	describe commercial vehicle tyre, tube and wheel and rim removal and refitting methods and procedures
4.6	outline the principles of wheel balancing. To include: a static balancing b dynamic balancing
4.7	state the process to re-groove a commercial vehicle tyre.

Unit 553 Knowledge of inspection, repair and replacement of commercial vehicle tyres

Supporting information

Candidates will be assessed on the assessment criteria as specified within the unit. The following information has been provided by IMI SSC and is included to support centres in terms of teaching and delivery.

Tyre construction

- a. Radial.
- b. Diagonal (cross) ply.
- c. Tube type.
- d. Tubeless.
- e. Tread designs (e.g. traction, steer, universal).

Types of commercial vehicle wheel and rim construction

- a. 15° Drop centre rims with diameter codes of 17.5, 19.5, 22.5.
- b. 15° EVA/EVH Drop centre rims.
- c. 15° Wide single drop centre rims.
- d. Wide base or semi drop centre split rims.
- e. British Standard conical, DIN spherical and ISO Metric wheel fixings.
- f. Heavy commercial valves.

Tools and equipment used to identify faults or serviceability

- a. Tyre safety inflation equipment (e.g. safety cages, portable 'H' cages and 'bag-it' type devices).
- b. Tyre tread depth gauges.
- c. Tyre probes.
- d. Bead spreaders.
- e. Tyre pressure gauges.
- f. Hand lamps or torches.
- g. Stud hole gauges.

Re-fitting and removal methods and procedures for commercial tyres, tubes, wheels and rims

- a. Fitting instructions.
- b. Vehicle protection.
- c. Use of impact tools.
- d. Correct tyre safety inflation.
- e. Final inspection.

Tools, equipment and information used for removal and replacement of commercial wheels, tyres and tubes

- a. Technical information relating to safe jacking points and wheel torque/tyre pressure data.
- b. Equipment for securing the vehicle and making the area safe (e.g. wheel chocks, traffic cones, 'Do Not Move' signs).
- c. Jacks, axle/chassis stands, loading boards.
- d. Sockets, extensions, 'L' bars, pneumatic impact wrenches, torque wrenches.
- e. Bead unseating tools inc specialist tools for EVA/EVH rims, tyre levers, lock-ring levers, bead lubricant, and tyre stands
- f. Tyre inflation equipment, safety inflation equipment (e.g. safety cages, portable 'H' cages and 'bag-it' type devices).

Tools and equipment used:

- a. Tyre re-grooving equipment.
- b. Tyre safety inflation equipment.
- c. Specialist bead and unseating tools for external valve aperture (EVA) and hole (EVH).

Inspection and fault identification methods and procedures

- a. Fault identification coverage.
- b. Accurate measurement.
- c. Adjustments to acceptable tolerances for the vehicle
- d. Inspection:
 - i. on the rim visual (external)
 - ii. removed from wheel (internal).
- e. Use of tread depth indicators, tyre probes and pressure gauges.
- f. Information sources including tyre and vehicle manufacturers' technical data.

Common faults associated with commercial vehicle tyres and wheels

- a. Worn tread through normal use.
- b. Abnormal wear (e.g. camber, wheel misalignment, incorrect twinning, worn dampers, braking flatspots, over/under-inflation).
- c. Carcass damage (e.g. lumps/bulges, cuts, exposed cords, run-flat damage, penetrations, chemical damage).
- d. Incorrect fitment (e.g. load rating, speed rating, size, construction).
- e. Worn or damaged wheels and components (e.g cracks, elongated or worn stud holes, deformations).
- f. Worn, damaged or incorrect wheel fixings.
- g. Worn or damaged valves.
- h. Worn, damaged or incorrect tubes and flaps.

Tools, equipment and information used for minor repairs to tyres and tubes

- a. Technical information relating to minor repair areas, repair unit application instructions and injury limitations.
- b. Suitable personal protective equipment for tyre and inner tube repairing.
- c. Measuring equipment for determining repairable areas.

- d. Reamers, buffers and tyre bead spreaders.
- e. Plug patch applicators, tyre probes, cover scrapers, roller stitchers, pliers and side cutters.
- f. Liquid buffing solutions, chemical vulcanising fluids, liner seal solutions and tyre talc (French Chalk).
- g. Combination plug/patches, patch and filler materials, inner tube patches.

Methods and materials used in the repair of commercial vehicle tyres

- a. Internal inspection of tyre for secondary damage.
- b. Preparation of the tyre for application of repair materials.
- c. Preparation of inner tube for application of repair materials.
- d. Inspection of tyre and tube after repair.
- e. Correct storage of materials (including shelf life).
- f. Inflation of tyre and tube to check for leaks.
- g. Repair Materials:
 - i. rubber only plug patch
 - ii. rubber only patch and filler material
 - iii. solutions and chemicals.

Tools and equipment used for regrooving of heavy commercial tyres

- a. Technical information relating to heavy commercial vehicle tyre regrooving.
- b. Suitable personal protective equipment for regrooving.
- c. Measuring equipment for determining tread depths and blade settings.
- d. Tyre probes, regrooving equipment, tyre regrooving stand.
- e. Cutting blades.

Methods used to carry out regrooving to heavy commercial tyres

- a. Inspection of tyre for damage and suitability for regrooving.
- b. Tread measurement to determine blade depth setting.
- c. Preparation of tyre for regrooving.
- d. Regrooving following manufacturer's instructions and legal requirements.
- e. Inspection of tyre following regrooving.

Dealing with waste materials including:

- a. Scrapped tyres.
- b. Repair materials.
- c. Wheel weights.

Legal Requirements to include:

- a. Tread depth.
- b. Tyre wall and casing damage.
- c. Tyre pressure.
- d. Mixing of tyre types.
- e. Re-grooving legislation.

Unit 594

Knowledge of receiving and storing stock

UAN:	Y/601/6086
Level:	1
Credit value:	4
GLH:	28
Relationship to NOS:	This unit is linked to VF44K Knowledge of Receiving and Storing Stock.
Endorsement by a sector or regulatory body:	This unit was developed by the IMI, the sector skills council for the automotive retail industry.
Aim:	<p>This unit enables the learner to develop an understanding of:</p> <ul style="list-style-type: none">• receiving parts into storage,• putting parts into the required location,• updating stock control systems• completing documentation in a dealership, fast fit centre, parts distribution centre or similar situation.

Learning outcome	The learner will:
1.	know about parts management systems and procedures
Assessment criteria	
The learner can:	
1.1	state systems and procedures for: <ul style="list-style-type: none">a. the receipt and storage of goods, including 'special order' partsb. parts storage, rotation and managementc. update of stock recordsd. completion of parts receipt and storage documentatione. reporting damage or incomplete deliveries
1.2	describe to whom discrepancies and storage problems should be reported
1.3	give examples of the differing security, safety (COSHH) and environmental conditions required for parts storage
1.4	state the requirements for and the importance of, wearing personal protective equipment when handling and moving parts
1.5	state the costs associated with damaged parts and why it is important that damaged parts are reported promptly.

Learning outcome	The learner will:
2.	know about parts handling and storage
Assessment criteria	
The learner can:	
2.1	give examples of how to perform visual and physical quality checks at the time of receipt of parts
2.2	give examples of how to locate where parts are stored using the parts information system in operation in your organisation
2.3	give examples of how to handle and move parts safely
2.4	give examples of how to use the mechanical handling equipment available in their parts operation
2.5	state how to store parts to make best use of available space and to adhere to regulations
2.6	state how to store parts to conform with any stock rotation requirements
2.7	identify when and where handling equipment should be used
2.8	state the storage requirements for special and or easily damaged parts and consumables.

Unit 594 Knowledge of receiving and storing stock

Supporting information

Candidates will be assessed on the assessment criteria as specified within the unit. The following information has been provided by IMI SSC and is included to support centres in terms of teaching and delivery.

Different types of storage equipment available in a Fast Fit Centre, to include:

- a. Adjustable storage racking.
- b. Tyre racking.
- c. Exhaust racking.
- d. Drawers.
- e. Wall bins.
- f. Battery storage.
- g. Lockable cabinets.

The types of stock can be stored with each type of storage equipment.

**Reasons for stock rotation; methods of identifying stock location
Storage of:**

- a. Tyres.
- b. Exhaust Components.
- c. Batteries.
- d. Brake Parts.
- e. Oil.

Workplace procedures for receipt of parts

- a. Routine deliveries.
- b. Shortages.
- c. Damage.
- d. Heavy or Bulky items.

Administrative procedures

- a. Updating stock records.
- b. Reporting damage or incomplete deliveries.
- c. Special order parts.



Appendix 1 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.cityandguilds.com**.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on such things as:

- **Walled Garden:** how to register and certificate candidates on line
- **Qualifications and Credit Framework (QCF):** general guidance about the QCF and how qualifications will change, as well as information on the IT systems needed and FAQs
- **Events:** dates and information on the latest Centre events
- **Online assessment:** information on how to register for GOL/e-volve assessments.

City & Guilds
Skills for a brighter future



www.cityandguilds.com

Useful contacts

UK learners

General qualification information

T: +44 (0)844 543 0033

E: learnersupport@cityandguilds.com

International learners

General qualification information

T: +44 (0)844 543 0033

F: +44 (0)20 7294 2413

E: intcg@cityandguilds.com

Centres

Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

E: centresupport@cityandguilds.com

Single subject qualifications

Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

F: +44 (0)20 7294 2404 (BB forms)

E: singlesubjects@cityandguilds.com

International awards

Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

E: intops@cityandguilds.com

Walled Garden

Re-issue of password or username, Technical problems, Entries, Results, GOLLA, Navigation, User/menu option, Problems

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

E: walledgarden@cityandguilds.com

Employer

Employer solutions, Mapping, Accreditation, Development Skills, Consultancy

T: +44 (0)121 503 8993

E: business@cityandguilds.com

Publications

Logbooks, Centre documents, Forms, Free literature

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

Every effort has been made to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept liability for loss or damage arising from the use of information in this publication.

If you have a complaint, or any suggestions for improvement about any of the services that we provide, email: feedbackandcomplaints@cityandguilds.com

About City & Guilds

As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. We offer over 500 qualifications across 28 industries through 8500 centres worldwide and award around two million certificates every year. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

City & Guilds Group

The City & Guilds Group operates from three major hubs: London (servicing Europe, the Caribbean and Americas), Johannesburg (servicing Africa), and Singapore (servicing Asia, Australia and New Zealand). The Group also includes the Institute of Leadership & Management (management and leadership qualifications), City & Guilds Land Based Services (land-based qualifications), the Centre for Skills Development (CSD works to improve the policy and practice of vocational education and training worldwide) and Learning Assistant (an online e-portfolio).

Copyright

The content of this document is, unless otherwise indicated, © The City and Guilds of London Institute and may not be copied, reproduced or distributed without prior written consent. However, approved City & Guilds centres and candidates studying for City & Guilds qualifications may photocopy this document free of charge and/or include a PDF version of it on centre intranets on the following conditions:

- centre staff may copy the material only for the purpose of teaching candidates working towards a City & Guilds qualification, or for internal administration purposes
- candidates may copy the material only for their own use when working towards a City & Guilds qualification

The *Standard Copying Conditions* (see the City & Guilds website) also apply.

Please note: National Occupational Standards are not © The City and Guilds of London Institute. Please check the conditions upon which they may be copied with the relevant Sector Skills Council.

Published by City & Guilds, a registered charity established to promote education and training

City & Guilds

1 Giltspur Street
London EC1A 9DD
T +44 (0)844 543 0000
F +44 (0)20 7294 2413
www.cityandguilds.com

WW-04-4270