



Tertiary and Vocational Education Commission

National Competency Standards and Curriculum

for

Wheel Alignment Technician - NVQ Level 3



Course synopsis

This course is designed to introduce students to careers in the field of Wheel Alignment Technician. It provides basic knowledge on steering geometrical and balancing of weights, and develops competencies of how to check, balance and align wheels in automobiles by using modern equipment according to the manufacturer's specifications to ensure vehicle stability and smooth running.

Course Title	Course Duration
Wheel Alignment Technician	3 months
NVQ – Level 3	
<p>Job outlook, objectives of the course and career paths available following completion of the course</p> <p>This course is designed to provide competencies required to carry out duties of a wheel alignment technician. The duties of a wheel alignment technician include the dismounting, mounting, handling scrap (or take-off-tires), balancing of all tires and aligning of wheels. General job functions include driving a customer's vehicle onto the alignment machine, adequately securing the vehicle prior to performing any alignment and safe handling of equipment and machineries.</p> <p>This a three months course including both theory and practical training</p> <p>Possible career paths for those obtaining this qualification are with</p> <ul style="list-style-type: none"> • Tire service alignment companies • General mechanical companies • Companies that specialise in servicing specialist vehicles such as trucks and agricultural vehicles. <p>or as an Entrepreneur</p>	

Competencies / modules to be covered**1. Receive the job to proceed wheel alignment**

This unit covers the competencies required to identify wheel alignment problems by communicating with the customer. It includes active listening and use of different question types and ensuring full support of the superior to go ahead.

2. Inspect the vehicle

This unit covers the competencies required to prepare the job and carry out inspection according to the Standard Operating Procedure while ensuring safe work practices and environment protection. It includes filling forms, preparing estimates for the repair work and preparing of a job card.

3. Carry out wheel alignment

This unit covers the competencies required to measure and adjust alignment angles by using modern equipment and prepare vehicle for delivery while ensuring safe work practices and good environmental conditions.

4. Carry out wheel balancing

This unit covers the competencies required to balance the wheel using a wheel balancing machine while ensuring safety of self, others and property while maintaining safe work practices and good environmental conditions.

5. Carry out tire changing

This unit covers the competencies required to change the tires of light vehicles and heavy vehicles according to manufacturer guide lines while maintaining safe work practices and good environmental conditions. It includes checking the condition of rim and wheels and selection of appropriate tires, handling scrap (or take-off-tires).

Recommended teaching methods :	Actual jobs simulations in teams, role plays, (student) demonstrations, guided practice, team discussions, student presentations, work place observations etc
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Module Title :	Course Duration
Receive the job to proceed wheel alignment	
<p>Objectives of the module</p> <p>This unit covers the competencies required to identify wheel alignment problems by communicating with the customer</p>	
<p>Competencies to be covered</p> <ol style="list-style-type: none"> 1. Acquire basic knowledge on suspension and steering system, wheels, tires, and recommended tire pressure via self-learning, tutorials and short lectures 2. Acquire and deepen communication skills (Customer greetings/ Enquire from the customer/Probing questioning, checking back with superior) 3. Carry out visual inspection of vehicle to identify any damages or missing items before receiving vehicle 4. Obtain vehicle identification number (VIN) details and vehicle history data 5. Fill forms and record information 6. Manage Time efficiently 	
Recommended teaching methods :	Communicative role plays, team simulations, real work situation

Module Title :	Course Duration:
Inspect the vehicle	
<p>Objectives of the module</p> <p>This unit covers the competencies required to prepare the job and carry out inspection according to the Standard Operating Procedure while ensuring safe work practices and good environmental conditions</p>	
<p>Competencies / modules to be covered</p> <ol style="list-style-type: none"> 1. Read and interpret Wheel alignment data manual and Vehicle user manual 2. Use of Personal Protective Equipment and explain why to others 3. Use lifting methods / jacking points 4. Use of required tools and equipment for inspection 5. Prepare for the job/work station 6. Carry out inspection 7. Identification of Tire wear pattern 8. Explain the procedure to customer 	
Recommended teaching methods :	technical projects, real work situations, customer role plays, situation simulations, student result presentations, etc.

Module Title	Course Duration
Carry out wheel alignment	
<p>Objectives of the module</p> <p>This unit covers the competencies required to measure and adjust alignment angles and prepare vehicles for delivery while ensuring safe work practices and good environmental conditions</p>	
<p>Competencies to be covered</p> <ol style="list-style-type: none"> 1. Prepare for the job 2. Interpret manuals and check back with colleagues 3. Handle lifting equipment 4. Handle wheel alignment equipment 5. Measure alignment angles before adjusting 6. Adjust alignment angles 7. Measure alignment angles after adjustment 8. Prepare vehicle for delivery 9. Communicate results to customer 	
Recommended teaching methods :	work place simulations, (student) demonstrations, colleague and customer role plays, student presentations, guided practice

Module Title	Course Duration
Carryout wheel balancing	
<p>Objectives of the module</p> <p>This unit covers the competencies required to balance the wheel while ensuring safety of self, others and property while ensuring safe work practices and good environmental conditions</p>	
<p>Competencies to be covered</p> <ol style="list-style-type: none"> 1. Use of Personal Protective Equipment 2. Use of required tools and equipment for wheel balancing 3. Tire matching 4. Prepare for the job/work station 5. Operate wheel balancing Machine 6. Record information and explain recording system 	
Recommended teaching methods :	Job simulations, presentations of situations, simulated record book entries, demonstration, guided practice

Module Title	Course Duration
Carry out tire changing	
<p>Objectives of the module</p> <p>This unit covers the competencies required to change the tires of light vehicles and heavy vehicles according to manufacturer guidelines while ensuring safe work practices and good environmental conditions</p>	
<p>Competencies to be covered</p> <ol style="list-style-type: none"> 1. Prepare for the job and communicate with colleagues 2. Remove tire without damaging the tire, tube, rim, valve and tire pressure sensor 3. Select tire and directions 4. Change the tire considering direction of rotation 5. Repair puncture of tire and tube 6. Operate air compressors 7. Inflate tire ensuring the bead of the tire is seated properly to the rim 8. Communicate the entire job and the necessity 	
Recommended teaching methods :	Work place simulations, (best student) demonstrations, role play communicative situation with colleagues, guided practices, case studies with problem, student presentations etc.