CORE COMPETENCIES
279 Hours

Unit of Competency	Learning Outcomes	Learning Activities	Methodology	Assessment Approach	Nominal Duration
1. Perform pre-delivery inspection	1.1 Prepare for pree-delivery inspection	• Identify required items before pre-delivery inspection on the vehicle • Prepare required items in the vehicle • Install factory-loaded parts on the vehicle • Removal of emergency towing eyelets, spring locks, labels, tags, stickers, covers and body protective films • Adjust tire pressure into standard pressure based on manufacturer's standards	• Lecture-Discussion • Demonstration • Video presentation • Film viewing	• Written exam • Demonstration • Oral questioning	9 hrs
	1.2 Perform physical and functional inspection	• Check all electrical components operation in the vehicle • Check all fluid level in the vehicle • Check the vehicle for leaks • Check the vehicle performance • Check minor defects of the vehicle • Accomplish inspection checklist based on manufacturers standards	• Lecture-Discussion • Demonstration • Video presentation • Film viewing	• Written exam • Demonstration • Oral questioning	16 hrs
	1.3 Complete work processes	• Perform engine oil top-up based on Manufacturer's standards • Perform Automatic Transmission oil top-up based on Manufacturer's standards • Perform Brake fluid top-up based on	• Lecture-Discussion • Demonstration • Video presentation • Film viewing	• Written exam • Demonstration • Oral questioning	8 hrs

Unit of Competency	Learning Outcomes	Learning Activities	Methodology	Assessment Approach	Nominal Duration
		Manufacturer's standards • Perform Coolant oil top-up based on Manufacturer's standards			
2. Perform periodic maintenance of automotive engine	2.1 Prepare for inspection and service engine	• Determine job requirements from workplace instructions • Source and interpret servicing information • Identify hazards associated with the work and manage risks • Select tools, equipment and materials and check it's serviceability	• Lecture • Demonstration • Video presentation • Workshop visit	• Demonstration • Written exam • Interview	41 hrs
	2.2 Inspect engine	• Carried out inspection according to manufacturer specifications, workplace procedures and safety requirements • Compared inspection results with manufacturer specifications • Report inspection findings according to workplace procedures, including recommendations for necessary repairs or adjustments	• Lecture • Demonstration • Video presentation • Workshop visit	• Demonstration • Written exam • Interview	47 hrs
	2.3 Service engine	• Carry out service and adjustments according to manufacturer specifications, workplace procedures, and safety and environmental requirements, and without causing damage to components or systems • Carry out post-service testing according to workplace procedures	• Lecture • Demonstration • Video presentation • Workshop visit	• Demonstration • Written exam • Interview	28 hrs

Unit of Competency	Learning Outcomes	Learning Activities	Methodology	Assessment Approach	Nominal Duration
	2.4 Complete work processes	• Make final inspection to ensure work is according to workplace expectations and vehicle or machinery is presented ready for use • Clean work area, dispose waste and non-recyclable materials and collect recyclable material • Check tools and equipment and store according to workplace procedures • Process workplace documentation according to workplace procedures	• Lecture • Demonstration • Video presentation • Workshop visit	• Demonstration • Written exam • Interview	20 hr
3. Perform periodic maintenance of drive train	3.1 Perform pre-service preparations	• Determine job requirements • Source servicing information from service manual • Use vehicle mileage as reference for changing fluid • Inspect transmission fluids condition • Acquire transmission fluids • Prepare tools for periodic maintenance of drive train • Manage hazards and risks	• Lecture • Demonstration • Video presentation • Workshop visit	• Demonstration • Written exam • Interview	6 hrs
	3.2 Conduct periodic maintenance of drive trains	• Drain fluids • Replace fluids • Clean drain plug • Replace drain plug washers • Lubricate propeller shafts • Inspect cracks and leaks of drive train components • Report findings to immediate superior	• Lecture • Demonstration • Video presentation • Workshop visit	• Demonstration • Written exam • Interview	16 hrs

Unit of Competency	Learning Outcomes	Learning Activities	Methodology	Assessment Approach	Nominal Duration
		• Apply safety practices			
	3.3 Perform post-service activities	• Confirm fluid level • Dispose wastes • Perform final inspection • Write down job done • Restore workplace	• Lecture • Demonstration • Video presentation • Workshop visit	• Demonstration • Written exam • Interview	6 hrs
4. Perform periodic maintenance of brake system	4.1 Prepare for periodic maintenance of brake system	• Demonstrate Job requirements are determined based on brake system repair order • Explain the service information sourced from the service manual • Prepare tools based on suspension system repair order • Explain hazards and risks associated in the workplace are managed following OSHS • Job and inspection performed is written/noted down on the repair order.	• Lecture-Discussion • Demonstration • Video presentation • Film viewing	• Written exam • Demonstrate • Oral questioning	4 hours
	4.2 Carry-out periodic maintenance procedures	• Demonstrate inspection of Brake system components according manufacturer's service workshop manual • Enumerate brake system components are replaced according manufacturer's service workshop manual • Demonstrate cleaning & lubrication of Brake caliper guide pins	• Lecture-Discussion • Demonstration • Video presentation • Film viewing	• Written exam • Demonstrate • Oral questioning	20 hours

Unit of Competency	Learning Outcomes	Learning Activities	Methodology	Assessment Approach	Nominal Duration
		• Demonstrate bleeding of brake system according to service workshop manual • Demonstrate Adjustment of Parking brake lever/pedal travel and cable tension according to service workshop manual • Demonstrate calibration of Electric parking brake according to service workshop manual • Explain reports of findings and recommendations to immediate superior following company's standard procedures • Apply safety practices			
	4.3 Complete periodic maintenance procedure	• Explain wastes disposal according to good housekeeping practices • Perform Road test following established standard operating procedure • Explain Job done written on the Repair Order • Workplace is restored according company's standard procedure	• Lecture-Discussion • Demonstration • Video presentation • Film viewing	• Written exam • Demonstrate • Oral questioning	4 hours
5. Perform periodic maintenance of suspension system	5.1 Perform pre-periodic maintenance of suspension system	• State the basic function of the suspension system • Identify the different types of suspension system • Explain the features of the different	• Lecture • Demonstration • Video presentation • Workshop visit	• Demonstration • Written exam • Interview • Role play	6 hours

Unit of Competency	Learning Outcomes	Learning Activities	Methodology	Assessment Approach	Nominal Duration
		types of suspension system • Identify the tools, equipment and materials required to service suspension system • Identify the different safety precautions, hazards and risks when servicing suspension system • Prepare tools, materials and equipment to be used for suspension system service			
	5.2 Apply periodic maintenance procedures	• Explain why tightening torque must be in accordance with the specified torque • Identify the suspension system fasteners that requires inspection of tightening torque • Describe how to check suspension system components • Describe how to use the torque wrench • Describe how to check tires • Describe how to check wheels • Describe how to check wheel bearing • Describe how to use the vernier caliper. • Describe how to use the dial gauge • Apply safety practice when conducting suspension system maintenance	• Lecture • Demonstration • Video presentation • Workshop visit	• Demonstration • Written exam • Interview • Role play	16 hours

Unit of Competency	Learning Outcomes	Learning Activities	Methodology	Assessment Approach	Nominal Duration
		• Demonstrate the correct method for handling of torque wrench • Demonstrate how to use torque when tightening suspension system fasteners • Demonstrate how to check tires using a vernier caliper • Demonstrate how to check wheel bearing axial play using a dial gauge • Demonstrate how to check tire axial run-out • Write job done on the repair order			
	5.3 Perform work to completion	• Recognize good housekeeping practices (5S) • Demonstrate the proper storage of torque wrench • Demonstrate the proper storage of vernier caliper • Demonstrate the proper storage of dial gauge • Conduct final inspection on job performed • Report findings and recommendations to immediate superior • Perform good housekeeping practices before and after each job	• Lecture • Demonstration • Video presentation • Workshop visit	• Demonstration • Written exam • Interview • Role play	8 hours
6. Perform periodic	6.1 Perform pre-periodic	• State the basic function of the steering system	• Lecture • Demonstration	• Demonstration • Written exam	8 hours

Unit of Competency	Learning Outcomes	Learning Activities	Methodology	Assessment Approach	Nominal Duration
maintenance of steering system	maintenance of steering system	• Identify the different types of steering system • Identify the tools, equipment and materials required to service steering system • Identify the different safety precautions, hazards and risks when servicing steering system • Prepare tools, materials and equipment to be used for steering system service	• Video presentation • Workshop visit	• Interview • Role play	
	6.2 Apply periodic maintenance procedures	• Explain why tightening torque must be in accordance with the specified torque • Identify the steering system fasteners that requires inspection of tightening torque • Describe how to check steering system components • Describe how to use the torque wrench • Describe how to replace power steering fluid • Describe how to check if malfunction exist on electric power steering • Apply safety practice when conducting steering system maintenance • Demonstrate the correct method for	• Lecture • Demonstration • Video presentation • Workshop visit	• Demonstration • Written exam • Interview • Role play	12 hours

Unit of Competency	Learning Outcomes	Learning Activities	Methodology	Assessment Approach	Nominal Duration
		handling of torque wrench • Demonstrate how to use torque when tightening steering system fasteners • Demonstrate how to replace power steering fluid • Demonstrate how to check electric power steering malfunction • Write job done on the repair order			
	6.3 Perform work to completion	• Recognize good housekeeping practices (5S) • Demonstrate the proper storage of torque wrench • Conduct final inspection on job performed • Report findings and recommendations to immediate superior • Perform good housekeeping practices before and after each job	• Lecture • Demonstration • Video presentation • Workshop visit	• Demonstration • Written exam • Interview • Role play	4 hours