CORE COMPETENCIES
(544 Hours)

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
1. Service motorcycle/small engine system	1.1 Service fuel system	• Apply company occupational safety and health (OSH) policies • Apply company standard operating procedures • Apply procedures on service manual • Apply procedures for shop maintenance • Identify types of fuel system • Differintiate types of gasoline • Define exhaust emission standard • Describe principle of fuel system • Diagnose fuel system malfunction • Apply basic/special/measuring tools and equipment • Apply basic troubleshooting method and workshop operation procedure • Disassemble fuel system component • Replace and assemble defective parts • Apply standard value of torque, clearances, limits	• Lecture • Discussion • Demonstration/ Hands-on	• Written Test • Interview • Demonstration • Observation	29 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
		• Check engine idling revolution per minute (RPM) • Apply occupational safety and health requirements • Observe environmental rules and regulations • Apply 5S • Apply tools and equipment maintenance			
	1.2 Service intake and exhaust system	• Apply company occupational safety and health (OSH) policies • Apply company standard operating procedures • Apply procedures from service manual • Define exhaust emission standard • Explain the types of intake and exhaust system • Differentiate types of gasoline • Explain the principle of intake and exhaust system • Apply basic, special and measuring tools • Diagnose intake and exhaust system malfunction • Disassemble intake and exhaust system components • Evaluate parts condition • Replace and assemble defective parts	• Lecture • Demonstration/ Hands-on • Discussion	• Written Test • Interview • Demonstration • Observation • Practical Examination • Oral questioning	24 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
		• Apply standard value of torque, clearances and limits			
	1.3 Service lubrication system	• Apply company occupational safety and health (OSH) policies • Apply company standard operating procedure • Explain the principle of lubrication system • Describe the types of lubrication system • Diagnose lubrication system malfunction • Disassemble lubrication system components • Evaluate parts condition • Replace and assemble the defective parts of lubrication system • Test oil pressure • Apply basic, special and measuring tools • Apply standard value of torque, clearances and limits • Observe environmental rules and regulations • Apply 5S • Apply tools and equipment maintenance	• Lecture • Demonstration/ Hands-on • Discussion	• Written Test • Practical Examination • Observation • Oral questioning	24 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
	1.4 Service cooling system	• Apply company occupational safety and health (OSH) policies • Apply company standard operating procedures • Explain the principle of lubrication system • Identify the types of cooling system • Apply basic, special and measuring tools • Diagnose cooling system malfunction • Evaluate parts condition • Replace and assemble the defective parts of cooling system • Apply standard value of torque, clearances and limits • Apply 5S • Apply tools and equipment maintenance	• Lecture • Demonstration/ Hands-on • Discussion	• Written Test • Practical Examination • Observation • Oral questioning	9 Hrs.
	1.5 Service transmission, and clutch system (for motorcycle)	• Apply company occupational safety and health (OSH) policies • Apply company standard operating procedures • Explain principle of transmission and clutch system	• Lecture • Demonstration/ Hands-on • Discussion	• Written Test • Practical Examination • Observation • Oral questioning	29 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
		• Identify types of transmission and clutch system • Apply basic, special and measuring tools • Diagnose the transmission and clutch system malfunction • Disassemble the transmission, and clutch system components • Evaluate parts condition • Replace and assemble the defective parts of transmission and clutch system • Apply standard value of torque, clearances and limits • Observe environmental rules and regulations • Apply 5S • Apply tools and equipment maintenance • Apply service shop maintenance			
	1.6 Clean-up work area	• Enumerate steps in cleaning-up work area • Apply company occupational safety and health (OSH) policies • Apply company standard operating procedures • Apply 5S	• Lecture • Demonstration/ Hands-on • Discussion	• Written Test • Practical Examination • Observation • Oral questioning	5 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
		• Apply tools and equipment maintenance • Apply service shop maintenance			
2. Service electrical system	2.1 Confirm and troubleshoot electrical system	• Apply company standard operating procedures • Apply company occupational safety and health (OSH) policies • Apply procedures from service manual • Explain operating principle of electrical system such as charging system, ignition system, lighting system, starting system, and fuel injection system • Apply basic/special/measuring tools and equipment • Identify electrical system malfunctions and related components • Apply standard value of tolerances, limits • Diagnose electrical system malfunctions	• Lecture • Discussion • Demonstration/ Hands-on	• Written Test • Interview • Demonstration	29 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
	2.2 Disassemble/ assemble electrical components	• Apply company standard operating procedures • Apply basic troubleshooting method and workshop operation procedures • Apply procedures from service manual • Explain operating principle of electrical system and components • Apply basic/special/measuring tools and equipment • Apply standard value of tolerances, limits • Identify defects of electrical components • Remove and disassemble electrical system components • Replace defective part and assemble/install new parts	• Lecture • Discussion • Demonstration/ Hands-on	• Written Test • Interview • Demonstration	19 Hrs.
	2.3 Final inspection of electrical system	• Apply company standard operating procedures • Apply procedures from service manual • Apply basic/special/measuring tools and equipment • Apply basic troubleshooting method and workshop operation procedures • Apply standard value of torque, clearances, limits	• Lecture • Discussion • Demonstration/ Hands-on	• Written Test • Interview • Demonstration	19 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
		• Inspect electrical system actual operation • Apply 5S • Apply tools and equipment maintenance • Apply service shop maintenance			
	2.4 Clean-up work area	• Enumerate steps in cleaning-up work area • Apply company occupational safety and health (OSH) policies • Apply company standard operating procedures • Apply 5S • Apply tools and equipment maintenance • Apply service shop maintenance	• Lecture • Demonstration/ Hands-on • Discussion	• Written Test • Practical Examination • Observation • Oral questioning	3 Hrs.
3. Service chassis	3.1 Service steering and suspension system	• Apply Company standard operating procedures • Apply company occupational safety and health (OSH) policies • Explain procedures for shop maintenance • Explain procedures on Service Manual • Describe Principle of Steering and Suspension system	• Lecture • Discussion • Demonstration/ Hands-on	• Written Test • Interview • Oral Questioning • Practical examination • Demonstration	49 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
		• Identify Types of Suspension system • Identify steering components and it's functions • Identify Suspension components and it's functions • Diagnose Steering and suspension malfunction • Apply procedures of disassembly and assembly of steering and suspension system • Apply procedures of replacing defective parts • Apply of Basic/Special/Measuring tools and equipment • Apply standard torques values, clearance and limits • Perform Final Inspection of steering and suspension system • Conduct road test • Apply Procedures for Shop Maintenance • Apply 5S • Apply tools and equipment maintenance • Observe environmental rules and regulations			

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
	3.2 Service final drive system (for motorcycle)	• Apply company occupational safety and health (OSH) policies • Apply company standard operating procedures • Explain principle final drive system • Identify types of final drive system • Apply basic, special and measuring tools • Diagnose the final drive system • malfunction • Disassemble the final drive • components • Evaluate parts condition of final drive system • Replace and assemble the defective parts of final drive system • Apply standard value of torque, clearances and limits • Observe environmental rules and regulations • Apply 5S • Apply tools and equipment maintenance • Apply service shop maintenance	• Lecture • Demonstration/ Hands-on • Discussion	• Written Test • Practical Examination • Observation • Oral questioning	19 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
	3.3 Service Brake System	• Apply company standard operating procedures • Apply company occupational safety and health (OSH) policies • Explain procedures on service manual • Explain procedures for shop maintenance • Explain principle operation of brake system • Identify types of brake system • Identify brake system components and it's functions • Diagnose brake system malfunction • Apply procedures for disassembly and assembly of brake system • Apply procedures for repairing brake system • Apply of basic/special/measuring tools and equipment • Apply standard torques values, clearances and limits • Apply standard adjustment/settings for brake system • Perform final Inspection of brake system	• Lecture • Discussion • Demonstration/ Hands-on	• Written Examination • Interview • Oral Questioning • Practical examination • Demonstration	34 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
		• Conduct road test • Apply procedures for shop maintenance • Apply 5S • Apply tools and equipment maintenance • Observe environmental rules and regulations			
	3.4 Service Wheels and Tires	• Apply Company standard operating procedure • Apply company occupational safety and health (OSH) policies • Explain procedures on service manual • Explain procedures for shop maintenance • Explain principle operation of wheels & tires • Identify types of wheels & tires • Identify wheels & tires components and it's functions • Diagnose wheels & tires malfunction • Apply procedures for disassembly and assembly of wheels & tires	• Lecture • Discussion • Demonstration/ Hands-on	• Written Test • Interview • Oral Questioning • Practical examination • Demonstration	24 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
		• Apply procedures for repair/replacement of defective parts of wheels & tires • Apply basic/special/ measuring tools and equipment • Apply standard torques values, clearances and limits • Perform final inspection of wheels & tires • Conduct road test • Apply procedures on shop maintenance • Apply 5S • Apply tools and equipment maintenance • Observe environmental rules and regulations			
	3.5 Clean-up work area	• Enumerate steps in cleaning-up work area • Apply company occupational safety and health (OSH) policies • Apply company standard operating procedures • Apply 5S • Apply tools and equipment maintenance • Apply service shop maintenance	• Lecture • Demonstration/ Hands-on • Discussion	• Written Test • Practical Examination • Observation • Oral questioning	4 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
4. Overhaul Motorcycle/ Small Engine	4.1 Remove engine from the unit	• Apply company standard operating procedures • Apply company occupational safety and health (OSH) policies • Explain procedures for shop maintenance • Explain procedures on service manual • Explain principle operation of motorcycle/small engine • Identify types of engine • Apply procedures for removal of external components • Apply procedures for engine removal • Apply of basic/special/ measuring tools and equipment • Apply procedures on shop maintenance • Apply 5S • Apply tools and equipment maintenance • Observe environmental rules and regulations	• Lecture • Discussion • Demonstration/ Hands-on	• Written Test • Interview • Oral Questioning • Practical Examination • Demonstration	43 Hrs.
	4.2 Disassemble Engine	• Apply Company standard operating procedure • Apply company occupational safety and health (OSH) policies	• Lecture • Discussion • Demonstration/ Hands-on	• Written Test • Interview • Oral Questioning • Practical examination • Demonstration	61 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
		• Explain procedures on service manual • Explain procedures for shop maintenance • Identify types of engine • Identify engine components and its functions • Apply procedures for engine disassembly • Apply of basic/special/measuring tools and equipment • Apply procedures in handling of parts • Apply procedures in handling of tools & equipment • Apply procedures for shop maintenance • Apply 5S • Apply tools and equipment maintenance • Observe environmental rules and regulations			
	4.3 Assemble Engine (Parts and Components)	• Apply company standard operating procedures • Apply company occupational safety and health (OSH) policies • Explain procedures on service manual • Explain procedures for shop maintenance	• Lecture • Discussion • Demonstration/ Hands-on	• Written Test • Interview • Oral Questioning • Practical examination • Demonstration	65 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
		• Explain principle operation of motorcycle/small engine • Apply procedures for engine assembly • Apply standard torques values, clearances and limits • Apply procedures in handling of parts • Apply procedures in handling of tools & equipment • Apply procedures for shop maintenance • Apply 5S • Apply tools and equipment maintenance			
	4.4 Re-install engine to frame	• Apply company standard operating procedures • Apply company occupational safety and health (OSH) policies • Explain procedures on service manual • Explain procedures for shop maintenance • Apply procedures for engine installation • Apply procedures for installation of external components • Apply procedures in handling of parts	• Lecture • Discussion • Discussion • Demonstration/ Hands-on	• Written Test • Interview • Oral Questioning • Practical examination • Demonstration	43 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
		• Apply procedures in handling of tools & equipment • Apply standard torques values, clearances and limits • Perform final inspection for engine installation • Apply procedures for shop maintenance • Apply 5S • Apply tools and equipment maintenance			
	4.5 Test engine performance	• Apply company standard operating procedures • Apply company occupational safety and health (OSH) policies • Explain emission standard under Philippine Clean Air Act • Explain procedure for pre-delivery inspection • Apply procedures for final checking and standard adjustments • Perform pre-delivery Inspection • Perform road test • Apply procedures for shop maintenance • Apply 5S	• Lecture • Discussion • Demonstration/ Hands-on	• Written Test • Interview • Oral Questioning • Practical examination • Demonstration	8 Hrs.

Unit of Competency	Learning Outcomes	Learning Activities	Methodologies	Assessment Methods	Nominal Duration
		• Apply tools and equipment maintenance • Observe environmental rules and regulations			
	4.6 Clean-up work area	• Enumerate steps in cleaning-up work area • Apply company occupational safety and health (OSH) policies • Apply company standard operating procedures • Apply 5S • Apply tools and equipment maintenance • Apply service shop maintenance	• Lecture • Demonstration/ Hands-on • Discussion	• Written Test • Practical Examination • Observation • Oral questioning	4 Hrs.