

# MOD - MILITARY VEHICLE MAINTENANCE

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## **MOD 110 Apply Health and Safety Procedures in Vehicle Maintenance (1-0-1)**

This unit aims to provide the learners with the necessary fundamentals and basic understanding of Occupational Health and Safety (OHS) at workplace, Health and Safety Management System (H&S MS) based on ISO 45001 – 2018, Identifying and controlling workplace hazards and complete a suitable risk assessment on the equipment, environment and methods relating to the engineering sector.

## **MOD 111 Conduct an Inspection of the Mechanical Systems in Heavy Vehicles (3-0-3)**

This unit is designed to equip participants with the essential knowledge and skills needed to perform comprehensive inspections of mechanical systems in heavy-duty vehicles. Participants will gain a deep understanding of the key components, safety protocols, and regulatory requirements associated with heavy vehicle inspection. Through a combination of theoretical learning and hands-on practical exercises, this course aims to empower individuals to conduct thorough and effective inspections, ensuring the optimal functioning and safety of heavy vehicles.

## **MOD 112 Manage Vehicle Technical Maintenance Equipment and Workshop Operations (2-0-2)**

This unit provides a comprehensive exploration of overseeing equipment, scheduling repairs, and optimizing workshop operations for vehicles. Focused on maintenance scheduling, calibration, and safety protocols, participants engage in hands-on exercises, troubleshooting, and simulated scenarios. Achieving Course Learning Outcomes includes efficiently managing workshop procedures, planning operations with equipment, and conducting work using maintenance tools. This unit ensures a blend of theoretical understanding and practical application.

## **MOD 113 Maintain Vehicle Ancillary Systems (4-0-4)**

This unit focuses on essential vehicle components. Participants will master maintaining engine cooling, oil, fuel, air intake, and electrical systems. Achieving Course Learning Outcomes involves proficiency in system maintenance, ensuring optimal functionality. Practical exercises and theoretical knowledge enhance participants' skills, making them adept in handling diverse ancillary systems crucial for the efficient operation of B-class vehicles.

## **MOD 114 Utilize Equipment to Maintain Vehicle Electrical Systems (0-1-1)**

This unit aims to provide learners with the knowledge, skills and competencies to utilize equipment to maintain vehicle electrical systems. Upon completion of the unit, learners will be able to utilize measurement equipment, utilize air conditioning equipment for light vehicle maintenance and utilize specialized equipment for vehicle maintenance.

## **MOD 115 Maintain the Electrical System for Heavy Vehicles (2-2-4)**

This unit aims to provide learners with the knowledge, skills and competencies to maintain the electrical system for heavy vehicles. Upon completion of this unit, learners will be able to inspect the engine starting and operation system, maintain the Protection Control Box and the power source system, in addition to troubleshooting control panel and display screen malfunctions in heavy vehicles.

## **MOD 116 Maintain the Glow plugs, Lighting and Transmission Systems for Heavy Vehicles (1-2-3)**

## **MOD 120 Demonstrate Knowledge of Computer Hardware, Networks and Security (1-0-1)**

This course introduces core principles of information technology, focusing on computer architecture and organization. Participants explore how different computer components are structured and collaborate for specific operations. The curriculum offers insights into computer hardware, networks, and security, emphasizing organizational elements. It provides a solid foundation for those entering the IT field, offering a holistic view of interconnected hardware, networks, security, with a spotlight on computer organization.

## **MOD 121 Conduct Basic Operations in Mathematics (1-0-1)**

This unit aims to provide learners with the knowledge, skills and competencies to conduct basic operations in mathematics. Upon completion of this unit, learners will be able to apply decimal rules and exponential laws, in addition to using fraction rules, scientific notations and geometric calculations in mathematical operations.

## **MOD 210 Demonstrate Knowledge of the Fundamentals of a Vehicle Air Conditioning System (1-0-1)**

In this course; participants engage in a comprehensive exploration of the essential principles governing automotive air conditioning. Through a blend of theoretical instruction and practical application, individuals will actively demonstrate their understanding of key concepts such as refrigeration cycles, components, and control mechanisms. The curriculum is structured to empower participants to systematically inspect, evaluate, and replace components within vehicle air conditioning systems, showcasing their proficiency in applying theoretical knowledge to practical scenarios.

## **MOD 211 Demonstrate Knowledge of the Fundamentals of an Electrical System (2-0-2)**

The unit invites learners to actively showcase their understanding of core principles in electrical engineering. Through a combination of theoretical exploration and practical application, individuals will actively demonstrate their knowledge of fundamental concepts such as voltage, current, resistance, and basic electrical theories. The unit is structured to empower participants to articulate key electrical principles and exhibit their proficiency in solving basic electrical problems. By emphasizing a hands-on approach, participants will confidently demonstrate their grasp of electrical system.

## **MOD 212 Maintain Vehicle Diesel Engine, Gearbox, Transmission and Differential Systems. (4-0-4)**

This unit is designed to provide participants with comprehensive knowledge and practical skills essential for the proficient maintenance of diesel engines and associated systems. Participants will engage in a thorough exploration of maintaining diesel engine systems, gearboxes, transmissions, and differentials. The course combines theoretical instruction with hands-on exercises, ensuring participants acquire the expertise needed to identify, troubleshoot, and maintain critical components.

## **MOD 213 Maintain Vehicle Chassis Systems (4-0-4)**

This unit focuses on honing skills in the upkeep of critical vehicular components. Participants will explore maintaining exhaust, steering, suspension, and braking systems. Through a blend of theoretical knowledge and hands-on exercises, the course equips individuals to proficiently manage and troubleshoot diverse chassis components. Emphasizing practical application, participants will gain expertise in maintaining these essential systems, ensuring optimal performance, safety, and longevity.

**MOD 214 Conduct an Inspection of the Hydraulic Systems in Vehicles (3-0-3)**

This unit provides essential insights into inspecting hydraulic systems in vehicles. Covering key components such as pumps, hoses, and cylinders, participants learn to assess for wear, leaks, and overall system functionality. Practical exercises enhance skills in diagnosing issues and ensuring optimal hydraulic system performance, making it a vital component for anyone involved in vehicle maintenance and inspection.

**MOD 215 Demonstrate Knowledge of the Military Technical Support Functions Within the United Arab Emirates (1-0-1)**

This unit equips participants with comprehensive knowledge of military technical support functions within the United Arab Emirates (UAE). Covering a range of specialized areas such as logistics, maintenance, and equipment support, participants will gain insights into the intricacies of sustaining military operations. The curriculum focuses on understanding the unique challenges and requirements specific to the UAE's military landscape, preparing individuals to contribute effectively to technical support functions within this context.

**MOD 216 Maintain Vehicle Air Conditioning System (2-0-2)**

In this program, learners will gain a deep understanding of the intricate workings of automotive air conditioning systems and develop the skills necessary to effectively maintain and troubleshoot them. Through a blend of theoretical insights and hands-on practical sessions, students will explore refrigeration principles, learn to diagnose common issues, and master the art of system maintenance. The course will cover topics such as refrigerant handling, compressor servicing, condenser and evaporator maintenance, and the importance of proper system diagnostics.

**MOD 217 Maintain the Operating System for High Mobility Trucks (2-2-4)**

This unit aims to provide learners with the knowledge, skills and competencies to maintain the operating system for high mobility trucks. Upon completion of this unit, learners will be able to maintain the engine starting and operation systems, the Electronic Control Box and the power source system in high mobility trucks. Learners will also be able to troubleshoot control panel and display screen malfunctions.

**MOD 218 Inspect the Lighting, Transmission and Auxiliary Systems for High Mobility Trucks (1-2-3)**

**MOD 219 Maintain the Operating System for Light Armored Vehicles (2-2-4)**

This unit aims to provide learners with the knowledge, skills and competencies to maintain the operating system for light armored vehicles. Upon completion of this unit, learners will be able to demonstrate knowledge of the operation system and the power electrical system of light armored vehicles. Learners will also be able to troubleshoot the malfunctions of the instrument panel and maintain the power electrical system of light armored vehicles.

**MOD 220 Maintain the Lighting and Auxiliary Systems for Light Armored Vehicles (1-2-3)**

**MOD 221 Maintain the Electrical System for Heavy Expanded Mobility Trucks (1-2-3)**