

**MONTGOMERY COUNTY GOVERNMENT
ROCKVILLE, MARYLAND
CLASS SPECIFICATION**

**Code No. 205004
Grade 12**

EMERGENCY VEHICLE MECHANIC TRAINEE

DEFINITION OF CLASS:

This is beginning level work in the Emergency Vehicle Mechanic Technician series, which centers on inspection, maintenance, repair and testing of a variety of specialized light, medium and heavy duty mobile Fire and Rescue Service (FRS) equipment, such as (a) mobile structural firefighting apparatus (squads, pumpers, tankers and aerial equipment) and (b) mobile emergency medical services (EMS) equipment (such as ambulances, evacuation vehicles and mass casualty vehicles). In addition to helping with maintenance and repair of these types of equipment, and building knowledge and skills to perform at higher level classes in the series, an employee in this class may maintain specialized portable fire and rescue service equipment. Primary business contacts are with employees in FRS (such as equipment maintenance personnel and supervisors in the shop, firefighters and EMS providers) to exchange routine information about equipment maintenance needs. This class may entail some public service/assistance, but it is incidental to the primary focus of the work performed.

An employee in this class receives frequent verbal and written instruction through on-the-job training, attendance at general shop meetings, and formal classroom instruction. The formal training and instruction are received through the employee's required participation in a formal training program, which may require employees to attend classroom instruction outside their regularly scheduled hours. Work is initially performed under the immediate supervision of a more highly skilled Mechanic Technician, and is frequently checked in progress and upon completion of adherence to guidelines, including instructions. Work is performed in strict accordance with repair/service manuals, instructions, specifications, tolerances, and shop SOPs. As the employee's knowledge of and skill in the trade increases, the employee is expected to perform increasingly complex and responsible semi-skilled and skilled work with a goal of becoming an Emergency Vehicle Mechanic Technician I. Complexity of the work is characterized by building knowledge and skills in the trade, distinguishing the meaning of readily apparent problems, and taking the appropriate action. Work involves the execution of specific work steps and processes that directly contribute to accomplishment of the work of the unit. Work is performed in a centralized equipment maintenance facility (mainly), on the road, at fire/rescue/EMS scenes or wherever a break down occurs. Outdoors repair work may be performed in any weather. Employees work in tiring and uncomfortable positions for long periods, and must continuously bend, reach, stretch, lift, stoop, climb and crouch often on top of, in, and under vehicles and engines in cramped and awkward positions. Performance of the work of the class regularly involves exposure to loud noises, vibrations, dust, dirt and grease. Employees perform physically strenuous work while standing, lying down, or sitting; and push, lift and carry or move and position work objects weighing up, or requiring force of, one hundred (100) pounds, and, occasionally, work objects/forces over one hundred (100) pounds; the employee obtains assistance or uses mechanical advantage, as appropriate. On a regularly recurring basis, work requires employees to move work objects and use tools near or immediately adjacent to energized equipment, which exposes employees to the potential adverse effects of compressed air, electrical current, belts, pulleys, fan blades and sharp edges. Additional hazards faced on a regularly recurring basis include spring-loaded parts, lifts and presses on wet/greasy floors,

hot hydraulic fluids and oils, use of acetylene and oxygen cutting torches near flammable substances, battery acid and cleaning solvents, and working at heights of from ten to thirty feet above the ground or floor level. Performance of the work of the class may occasionally expose employees to human waste and/or body fluids, as may be found in ambulances. These hazardous working conditions require employees to maintain situational awareness, strictly follow safety rules and procedures and regularly use safety equipment, such as safety glasses, rubber or leather gloves, hearing protection, eye and face shield, respiratory mask, and steel-toe shoes. Despite these precautions, employees regularly receive cuts, burns, bruises and strains as well as eye, ear, nose, throat and skin irritations.

EXAMPLES OF DUTIES: (Illustrative Only)

- Performs baseline preventive maintenance checks and services on equipment – checks tire wear, lubricates parts, replaces seals/wear rings, replaces filters, including high-efficiency particulate air (HEPA) filters in ambulance air filtration systems, etc.
- Performs baseline repairs to equipment – changes tires; re-lamps; replaces mounting hardware, hoses, lighting units (brake lights, backup lights, headlights, clearance lights, dash lights, etc.), fuses, exhaust pipes, and mufflers; fixes chain saws, etc.
- Road tests vehicles during and occasionally upon completion of maintenance/repair work.
- Receives on-the-job and classroom instruction to accomplish a broader variety of tasks, to develop the knowledge and acquire the skills to perform higher level tasks, and to learn the tools, techniques and procedures of the trade.
- Performs "bench" and "floor" work within capabilities, utilizing hand and power tools and equipment of the trade.
- Cleans, sharpens, repairs, and otherwise maintains hand and power tools and equipment.
- Handles hazardous waste properly, maintains work area in a clean and orderly manner and performs various “shop-keeping” tasks.
- Performs related duties as required.

KNOWLEDGE, SKILLS AND ABILITIES:

- Knowledge of the main structural components and the basics of the main systems, subsystems and assemblies of wheeled vehicles (such as charging and braking systems, batteries, alternators, axles, wheels and tires) to perform baseline preventive maintenance and repair work on vehicles and equipment.
- Demonstrated ability and willingness to learn the mechanical makeup, operation, and working relationships of a variety of light-medium-heavy duty truck systems, subsystems and assemblies (including the basics of diesel, multi-fuel, and gasoline engines, fuel systems, exhaust systems, clutches, steering systems, air/hydraulic braking systems, air/hydraulic antilock braking systems, HVAC-R systems, and chassis) to build knowledge and skills to perform a wider array of trainee level tasks and to perform at a higher grade level.
- Awareness of, and willingness to comply with, the occupational hazards and safety precautions of the equipment mechanic trade to work safely.
- Skill in problem solving to select, organize and logically process relevant information (verbal, numerical or abstract) to solve a problem. Examples include performing baseline preventive maintenance checks and services (such as checking tire wear, lubricating parts and replacing filters); performing trainee level mechanic work on equipment and supporting higher grade mechanics in their work; learning how to diagnose mechanical, electrical and electronic malfunctions; learning

how to interpret schematics; and learning how to use the hand and power tools and equipment of the fire/rescue/EMS equipment mechanic trade.

- Skill in oral communication to communicate effectively with business contacts.
- Skill in written communication to understand service manuals/bulletins, complete records of work performed, etc.
- Interpersonal skills to interact with others in a businesslike, customer service-oriented manner.
- Ability to work as a team member to provide excellent customer service.
- Ability to lift and move objects that weigh up to one hundred (100) pounds, and occasionally objects that weigh in excess of one hundred (100) pounds, obtaining assistance or using mechanical advantage, as appropriate.
- Ability to work overhead or in stretched, cramped, awkward, tiring, and uncomfortable positions.
- Ability to safely operate all fire/rescue apparatus and their respective components.
- Ability to use and wear personal protective clothing and equipment when exposed to dust, fumes, and other irritants to eyes, nose, ears, skin and respiratory system.
- Ability to distinguish between color-coded objects, such as electrical wiring.
- Ability and willingness to provide emergency repair service support to higher skilled mechanics on fire/rescue/EMS apparatus and equipment outside the regular shop location.

MINIMUM QUALIFICATIONS:

Experience: One (1) year of verifiable automotive or other type of mechanical maintenance and repair experience. An employee is assigned to this class with minimal automotive maintenance and repair experience in order to build knowledge and skills to perform maintenance and repair tasks on a wide variety of light, medium and heavy duty FRS vehicles, apparatus and equipment as well as portable firefighting and rescue equipment.

Education: Completion of high school or High School Certificate of completion recognized in the State of Maryland.

Equivalency: An equivalent combination of education and experience may be substituted.

License: At Time of Employment Application: Possession of a valid, current Class "C" or equivalent motor vehicle operator's license from the applicant's state of residence. **First Day of County**

Employment: Possession of *at least* a valid Instructional Permit for a Class "A" commercial driver's license (CDL) issued by the applicant's state of residence. **Upon Completion of Probationary Period:** Possession of a Class "A" CDL issued by the employee's state of residence; US Environmental Protection Agency-approved certification (for refrigerant recovery appropriate to the equipment serviced/inspected); and a Maryland State Forklift Operator License. In addition, employees in this class *must* obtain a National Fire Protection Association (NFPA) Emergency Vehicle Technician (EVT) Level I certification to progress in the career ladder. EVT Level I certification includes successful completion of examinations in:

- T4 Medium-Heavy Truck, Brakes (National Institute for Automotive Service Excellence - ASE);
- T5 Medium-Heavy Truck, Suspension and Steering (ASE);
- T8 Medium-Heavy Preventive Maintenance Inspection (ASE);
- F1 Maintenance, Inspection and Testing of Fire Apparatus (EVT); and
- F2 Design and Performance Standards of Fire Apparatus (EVT).

Note: There will be no substitutions for this section.

PROBATIONARY PERIOD:

Individuals appointed to a non-bargaining unit position in this class will be required to serve a probationary period of six (6) months; or if promoted to a non-bargaining unit position in this class, serve a probationary period of six (6) months. Individuals appointed or promoted to a bargaining unit position in this class will be required to serve a probationary period of six (6) months. Performance will be carefully evaluated during the probationary period. Continuation in this class will be contingent upon successful completion of the probationary period.

MEDICAL EXAM PROTOCOL: Pre-placement Core II Exam.

Class Established: September 2015

Date Revised: February 2020

Revised: "Probational Period"