

**FIRE DEPARTMENT MECHANIC**

(Competitive Class)

**DISTINGUISHING FEATURES OF THE CLASS**

This class encompasses positions in the repair and maintenance of fire department vehicles and equipment. Incumbents of this class diagnose mechanical problems and conduct safety inspections on all departmental vehicles. Employees of this class make repairs to fire apparatus and fire apparatus equipment, perform maintenance tasks and adjustments on fire department vehicles and equipment, and organize replacement parts for fire vehicles and equipment. Fire Department Mechanics perform duties with little supervision in most areas, performing special tasks assigned with only general instructions, and report to and have work reviewed by the Fire Chief.

**EXAMPLES OF WORK**

Examples listed below are illustrative only. They are not intended to include all duties which may be assigned, neither are they intended to exclude other duties which may be logical assignments to this class.

Performs maintenance, repairs or adjustments on cooling, fuel, lubricating and electrical systems of fire department apparatus and vehicles. Ensures proper working order to systems by installing replacement parts, such as fan and fan belts, fuel lines and filters, oil seals and PCV systems, batteries, spark plugs and cables and other parts as necessary. Performs maintenance, repairs or adjustments on brake, drive train, emission and suspension systems. Installs necessary replacement parts to such systems, such as replacing drum, disc or power brakes, clutches and transmissions, mufflers, tires and wheel bearings.

Performs maintenance and repairs to gasoline engines which may include the installation or replacement of intake and exhaust manifolds, cylinder heads, crankshaft, gaskets or valves. Performs maintenance and repairs to diesel engines which may include adjusting or replacing scavenging-air compressors, governors, fuel spray nozzles and turbochargers. Repairs fire apparatus hydraulic equipment, such as pumps, aerial ladders, and hydraulic motors and cylinders.

Performs general maintenance tasks on departmental vehicles and fire apparatus, such as refueling vehicles, changing and adding oil, and adjusting headlights, as needed in order to assure peak performance. Replaces and installs accessories on automotive equipment, such as windshield wipers, lights and flashers as needed. Uses automotive maintenance instruments in the maintenance or repair of fire automotive equipment including the use of hydrometers, voltmeters, dynamometer, and vacuum gauges.

Inspects, maintains, repairs, and performs service tests on fire hoses, hose couplings, hose attachments, nozzles, and nozzle assemblies on fire apparatus.

Provides for the repair and maintenance on portable equipment and small power tools, such as portable generators and pumps, power saws and water towers, lawn mowers and edgers, and any department equipment as required. Installs, maintains, and repairs overhead doors.

Inspects, maintains, tests, and repairs open and closed-circuit breathing apparatus including the backpack and harness assembly, air cylinder valve, facepiece, and regulator. Conducts flow test of self-contained breathing apparatus. Refills self-contained breathing apparatus using the cascade or compressor/purifier system.

Diagnoses mechanical problems from information received from fire department personnel. Reads service manuals, parts books, and any other written material necessary to determine how to perform required repairs and maintenance duties. Makes mathematical calculations in order to perform accurate and correct measurements, adjustments, or calibrations.

Determines if firefighting apparatus involved in an accident is safe for continued use. Locates and arranges for outside services for repair and maintenance of department equipment or vehicles when needed. Transports, delivers, and pick ups equipment for repair or maintenance by driving department vehicles. Inspects, tests and ensures completed repairs from outside services on all vehicles and equipment, including communications equipment, were effectively accomplished. Conducts required safety inspections on all department vehicles, including inspecting equipment after repair.

Purchases supplies, equipment and parts which may include preparing specifications for public bids, meeting with sales representatives, reviewing products and evaluating specifications for purchases within the maintenance division. Prepares expenditure estimates for the departmental operating budget as needed for the maintenance division. May gather information to be used in compiling budgets.

Maintains inventory of supplies and parts necessary to perform the work in the maintenance division. Organizes and stores department property, equipment and supplies in an orderly fashion to allow ease of locating and retrieving materials.

Writes reports and completes any forms and records required. Retrieves records, reports, or forms from the file when needed.

Performs any related duties assigned.

**QUALIFICATION REQUIREMENTS**

Unless otherwise specified, all requirements listed below must be met by the filing deadline for application for admission to the examination.

Must meet all requirements of the Municipal Fire and Police Civil Service Law, including being a citizen of the United States and of legal age.

After offer of employment, but before beginning work in this class, must pass a physical examination, the selection and administration of which shall be authorized by the Appointing Authority, designed to demonstrate good health and physical fitness sufficient to perform the essential duties of the position, with or without accommodation.

Must possess a valid driver's license.

Must not be less than 18 years of age.

Applicant must possess one of the following: high school diploma, general educational development (G.E.D.) certificate, high school transcript, affidavit from the issuing high school, associate's or bachelor's degree, or college transcript, any one of which must indicate that graduation has occurred or a degree awarded. A certification of completion shall not be sufficient to substitute for a diploma or G.E.D. certificate.

Must have at least five (5) years experience in the repair, rebuilding, and/or maintenance of heavy equipment, diesel engines, hydraulic systems, and water pumps.

**OR**

must have at least three (3) years experience as a full-time mechanic for a fire department.