

## Fire Mechanic Job Description

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job. Employees acting in this position will be held to this standard as well as that of their assigned rank.

### Summary Job Description

Under the direct supervision of a Battalion Chief, and the general supervision of the Operations/Division Chief, the Mechanic is responsible for repairing and maintaining all District fire apparatus, vehicles and equipment. Work performed covers a complete range of diesel and gasoline powered apparatus and equipment. The mechanic does other related work as required. An employee in this class performs skilled tasks in the mechanical repair and maintenance of diesel and gasoline powered fire apparatus, hydraulic systems, gasoline powered automobiles/pickups at a journeyman level. Assignments are received in the form of general, oral or written work orders, but the employee is expected to determine the nature and extent of needed repairs. The employee may provide technical assistance in developing fleet vehicle and equipment specifications; coordinate vehicle replacement plan and schedule; monitor and report on government mandated programs; and provide related statistical analysis. All work is reviewed through the proper and safe functioning and performance of equipment and apparatus repaired.

### Representative Duties and Knowledge

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

This position requires a high degree of technical knowledge, as well as the ability to exercise independent judgment when determining repair methods.

Diagnose, repair and maintenance of specialized fire equipment including fire pumps and related relief valves, ball valves, primer pumps and power take-offs, electric and hydraulic systems, steering mechanisms, emergency lights, computerized ignition, pneumatic system, fuel delivery systems, air brakes, suspensions, and transmissions.

Performs installation, repairs and maintenance on foam delivery systems, emergency lighting systems, sirens and radios. Inspects and repairs electronically controlled devices on vehicles and equipment. Diagnoses mechanical problems using electronic and mechanical test equipment. Uses welding equipment to fabricate metal parts/equipment and repair broken parts.

Performs installation of varied electrical and other auxiliary equipment onto existing vehicles. Performs physical inventories of shop parts, tools, and equipment. Maintains District's emergency generators at each fire station.

Performs all levels of repair to self-contained breathing apparatus. Performs routine maintenance on breathing air compressor and conducts necessary air sampling etc. Completes maintenance forms and service records.

Reads and interprets technical manuals, plumbing and electrical schematics. Cleans and maintains work area in an orderly manner; maintains shop tools in safe and proper working condition. Position responsibilities also include making minor repairs, replacing inoperative parts, checking and adjusting brakes, changing oil and filters, installing batteries, tires, and glass.

Requisitions parts, tools, equipment, and materials needed for repair work. Directs and approves the purchase of inventory parts and materials, contractual services, new and replacement equipment, and other fleet related requirements.

Organizes and conducts a program of preventive maintenance for all fire apparatus and related equipment.

Performs annual inspections and maintenance for all District vehicles; conducts acceptance and annual service tests of engines, pumps and related equipment.

Answers emergency calls to repair equipment in case of breakdowns/accidents. May assist with reports on major accidents. Document and report all work utilizing the Fire District's computerized fleet management system.

Prepares records reflecting amount of time spent and replacement parts utilized in repairing fire equipment. Maintains records and reports on all District apparatus, tools and equipment.

Reviews vehicle and equipment needs of the District; drafts requirements and specifications formatted for the bidding and acquisition of vehicles and equipment. Corresponds and maintains liaison with equipment suppliers, inspects bids submitted, recommends acquisition, and ensures manufacturer's compliance. Conducts fleet life cycle analysis in determining fleet replacement schedule; and conducts other studies to institute optimum efficiency and effectiveness.

Administers program compliance with federal, state and local mandates; responsible for the accurate and timely reporting to ensure conformance. Assures that work is accomplished in accordance with established safety practices.

Instructs others in proper equipment operation and maintenance, and conducts training classes. Drives/operates a variety of District vehicles. Operates a variety of standard office equipment such as a computer, copier or fax machine. Returns to duty when called in for emergency repair or other District emergencies.

A thorough knowledge of effective practices, methods, tools, equipment, and materials used in the maintenance and repair of fire apparatus and equipment, heavy equipment hydraulic system operation and maintenance, and heavy truck and automotive engines; a good knowledge of preventive maintenance principles and methods; a good knowledge of standard practices in machine shop, sheet metal, blacksmithing, arc and acetylene welding, and automotive electrical work; a good knowledge of current sources of information on operating, maintenance and repair problems; the ability to make time, material and budget estimates; and a thorough knowledge of repair shop accident prevention measures, safety devices, and occupational hazards.

Skilled in the use and operation of standard and specialized tools and equipment utilized in the repair and maintenance of gasoline and diesel powered equipment; setting hydraulic pressures to manufacturer specifications; assembling and disassembling equipment and system components.

Able to or willing to learn how to program portable, mobile and base station radios including working with operations to build a satisfactory Communications Plan when needed.

Coordinate with the Communications Coordinator and help to facilitate the installation and repair of remote radio receivers and repeater sites.

**Abilities:**

Ability to understand and follow oral and/or written policies, procedures and instructions; communicate well with others, both orally and in writing, using both technical and non-technical language; work independently in the absence of supervision; perform a wide variety of duties and responsibilities with accuracy and speed under the pressure of time-sensitive deadlines; operate or quickly learn to operate a personal computer using standard and customized software applications appropriate to assigned tasks; recognize differences in color to assure safety requirements in electrical wire repairs.

**Minimum Qualifications:**

Possession of valid California Drivers License issued by DMV at time of appointment. Possess an appropriate California Drivers License to drive fire apparatus as required by State law with a satisfactory driving record. AED and CPR certifications within 6 months of employment.

Must have 3 years experience maintaining and repairing medium and heavy trucks; or an equivalent combination of education and experience sufficient to successfully perform the essential duties of the job. Experience in diesel engine, air brakes and repairing and maintaining fire apparatus and equipment is strongly preferred.

Must complete Automotive Service Excellence (ASE) Master Technician Certificate program within two (2) years of appointment. After completion, must maintain certification by retesting every 5 years.

Must complete Automotive Service Excellence (ASE) Truck Technician Certificate program within two (2) years of appointment. After completion, must maintain certification by retesting every 5 years.

Must complete State Fire Marshall Fire Equipment Mechanic I and II within five (5) years of appointment.

#### Other Requirements

12 month probationary period.

#### Physical Demands and Working Environment

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

#### Physical:

Primary functions require sufficient physical ability to work both indoors in an office-type setting and outdoors in extreme weather conditions. Continuous sitting and upward and downward flexion of neck; side-to-side turning of neck; twisting and bending at the waist; and reaching below the shoulders. Frequent standing; walking and walking on uneven ground; reaching at and above the shoulder; power grasping, and pushing and pulling of objects and equipment; fine finger dexterity, simple grasping and repetitive use of hands to manipulate equipment controls, keyboard and other office equipment. Occasional running, crawling, kneeling, climbing, balancing and squatting; lifting and carrying objects more than 100 pounds with or without assistance.

#### Environment:

Exposure to extreme heat, cold, humidity and temperature swings working indoors and outdoors; excessive noise of emergency equipment; the noise level may be very loud when responding to emergency calls and when working at a fire or other emergency incident; exposure to dust, gases, chemicals, smoke, and blood-borne pathogens; occasional exposure to explosives at fires or other hazardous materials calls; works in and around heavy equipment with exposure to moving mechanical parts; exposure to vibration from equipment and vehicles; operations of foot controls or repetitive foot motion; may work at substantial heights; wears appropriate personal protective equipment including goggles, ear plugs or other auditory protective equipment, face protector.