

## **FIRE EQUIPMENT MECHANIC I**

### **DEFINITION**

Under close supervision, maintains and repairs Fire Department heavy equipment, apparatus, and related fire-fighting equipment.

### **SUPERVISION RECEIVED/EXERCISED**

Receives supervision from the Equipment Supervisor. This class does not exercise supervision.

### **DISTINGUISHING CHARACTERISTICS**

Fire Equipment Mechanic I is the entry level class in the Fire Equipment Mechanic series. Applying previously acquired mechanical skills, incumbents perform regularly scheduled maintenance and minor repairs, while learning the special skills required to maintain and repair fire apparatus and related equipment. This class differs from Fire Equipment Mechanic II in that the latter is the journey level class in which incumbents are expected to independently diagnose and complete maintenance and repair assignments with minimal supervision.

### **EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES**

*May include but are not limited to the following:*

Maintains and repairs all Fire Department equipment and apparatus including engines, trucks, air brake systems and ladders; designs and constructs component parts and units necessary to the operation of equipment and apparatus.

Rebuilds parts, such as fire pumps, valves, transmission mounts, brackets and clamps.

Performs simple fabrication tasks using lathes, shapers, drill presses, and welding equipment.

Fills Self Contained Breathing Air (SCBA) cylinders as needed.

Disassembles, cleans, repairs and tests pumps, air compressors, resuscitators, extension ladders, and related Fire Department equipment.

Assists Fire Equipment Mechanic II's with repair and overhaul of diesel and gasoline engines, ignition systems, drive train, brakes, suspension & steering, electrical, and HVAC systems, and performs preventative maintenance, using standard testing equipment.

Reads and interpret technical documents related to fire vehicles and equipment.

Maintains a clean work area and assists with the cleaning of shop areas and equipment.

Performs related duties as required.

### **JOB RELATED AND ESSENTIAL QUALIFICATIONS**

#### **Knowledge of:**

The methods, materials, tools, and techniques used in the maintenance and repair of heavy and light equipment.

Hydraulics and pump operations, air brake systems, electronic controls and electrical wiring systems.

The operating principles of gasoline and diesel engines, and of mechanical repair of trucks and firefighting apparatus and equipment.

Pertinent OSHA requirements, occupational hazards, and safety precautions of the trade.

#### **Ability to:**

Diagnose defects in heavy and light equipment.

Adapt test equipment, available tools and repair parts to specific repair problems.

Perform basic acetylene and electric welding.

Operate computers and applicable software applications for basic data entry necessary for completion of assigned duties and daily reports.

Establish and maintain effective working relationships with those contacted in the performance of assigned duties.

#### **Skill to:**

Properly use hand and power tools and equipment used in the machinist trade.

Use electronic diagnostic equipment and diagnostic software programs.

Safely operate a motor vehicle.

**MINIMUM QUALIFICATIONS**

Possession of a High School Diploma or equivalent GED completion

**AND**

One (1) year of full-time paid experience performing routine maintenance and simple repairs in a heavy/transit equipment repair operation;

**Special Requirement(s):**

Possess a valid California Driver's License at time of appointment.

Within thirty (30) days of appointment must obtain a valid Commercial Instructional Permit.

Within twelve (12) months, must obtain and maintain:

- A valid Commercial Class B California Driver's License with required endorsements and without air brake restriction.
- Three (3) valid certifications issued by the National Institute for Automotive Service Excellence (ASE), a minimum of one per component area:

Component Area 1:

Gasoline Engines (T1)

Diesel Engines (T2)

Component Area 2:

Brakes (T4)

Electrical/ Electronic Systems (T6)

Preventive Maintenance Inspection (8)

Incumbents must take all three certification examinations within the first six (6) months of appointment. Failure to obtain the ASE certifications within twelve (12) months of appointment will be cause for termination from this class.

A Fire Equipment Mechanic I may be promoted to a Fire Equipment Mechanic II after a minimum of six (6) months of experience and upon recommendation of the appointing authority and possession of three (3) T Series ASE certifications as noted above.

Incumbents shall undergo the process of meeting the educational and certification requirements set forth in the California Office of the State Fire Marshal (OSFM) Training Procedures Manual for Fire Mechanic I (Fire Pumps and Accessories).

NOTE: Fire Mechanic I certification shall be obtained within one (1) year from date of appointment as a Fire Equipment Mechanic II. Failure to obtain the required certification within the specified time period shall be cause for termination.

APPROVED: (Signature on File)  
Director of Personnel Services

DATE: 12/8/2017

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