## FIRE DEPARTMENT SANTA CLARA COUNTY

#### **FIRE MECHANIC II**

#### **DEFINITION**

The classification of Fire Mechanic II performs complex journey-level mechanical work in the maintenance and repair of Fire Department fleet such as passenger cars, trucks, fire equipment and fire apparatus.

This classification is a Fair Labor Standards Act non-exempt, represented position in the Classified Service.

#### DISTINGUISHING CHARACTERISTICS

This class is distinguished from the next higher classification of Senior Mechanic in that the latter is a supervisory position responsible for the overall day-to-day operation of the Shop. This class is also distinguished from the Fire Mechanic I classification in that the incumbent in this classification performs advanced servicing and installation functions and provides lead direction to the Fire Mechanic I. Personnel at this level are required to be knowledgeable of, and have the ability to perform the procedures related to the assigned area of responsibility. The classifications of Fire Mechanic I and II are alternately staffed positions.

## **EXAMPLES OF DUTIES**

Depending upon assignment duties may include, but are not limited to, the following:

- Provide guidance in a lead capacity to the Fire Mechanic I classification. Lead, plans, train and review the work of personnel responsible for performing semi-skilled and skilled maintenance and repair of Department vehicles and fire apparatus.
- Train and provide guidance to assigned personnel in areas of work including equipment and vehicle maintenance, mechanical repair methods, procedures and techniques including supervision in the use and care of hand and power tools and equipment used to perform tasks.
- Perform a variety of complex tasks in the servicing, maintenance and repair of fire apparatus and vehicles including all mechanical components, parts and accessories. This includes overhaul and repair of components such as computerized engine control systems, anti-lock brake systems, multiplexed electrical systems, HVAC systems and passive restraint systems.
- Install specialized equipment including Code 3 systems, GPS systems, communication systems and traffic control devices. Some aspects of designing additional systems to meet Department specifications may be required.
- Must be experienced and trained in the use of a variety of diagnostic equipment necessary to perform the tasks and ensure proper adjustment and operation of all systems; ascertaining needed repairs, estimate time, materials and equipment required; and fill out necessary requisition forms for the jobs assigned.
- Operate welding equipment in making repairs and fabricating special parts and tools. Must have the ability to perform the following processes: oxy-acetylene, SMAW (shielded metal arc welding), GMAW (gas metal arc welding) and plasma cutting.

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### **EXAMPLES OF DUTIES (continued)**

- Perform road tests, detects problem source(s) and checks vehicles for proper operation of bodies, frames, suspension and drive train, electrical systems, discs, drums, air and hydraulic brake systems (including secondary brake systems).
- Diagnose and service transmissions.
- Diagnose and repair electronic systems and electrical wiring circuits.
- Adjust and maintain smog devices, opacity testing and headlamps to meet specifications for performance and safety.
- Perform emergency road service calls for minor and major repairs, vehicle recovery, and dispatch tow trucks to disabled apparatus or vehicles as needed.
- Respond to emergency incidents as directed; may be required to perform a variety of support functions, e.g., emergency scene safety inspections and repairs, refueling and other functions, as needed.
- Perform periodic safety inspections and repair of equipment and apparatus at fire stations.
- Maintain repair records and prepare reports (both hard copy and electronic format).
- Maintain and repair Shop equipment and ensure that Shop area is cleaned.
- Participate in Department committees and provide input on vehicle and apparatus specifications and on the purchase of Shop tools and equipment.
- Provide work direction to other Department personnel as pertains to the Shop.
- Perform related duties, tasks and responsibilities as required.

#### **EMPLOYMENT STANDARDS**

<u>Education and Experience</u>: Graduation from high school or passing the General Education Development (GED) test and four (4) years of experience as a journey-level mechanic, specifically involving maintenance of diesel engines and heavy trucks.

As a condition of employment, must possess and maintain the State Fire Marshal Emergency Vehicle Technician II certification.

An incumbent possessing the Fire Mechanic II certification will be required to pass and maintain recertification as an Emergency Vehicle Technician II upon renewal.

## Knowledge of:

- Current principles, methods, tools and equipment used in the maintenance and repair of automobiles, heavy trucks and fire apparatus.
- Principles of diesel and gasoline engines, diagnostic equipment and hydraulics.
- Brake systems.
- Water pumps and foam delivery systems including diagnosis, testing, repairs and rebuild.

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## Knowledge of: (continued)

- Cascade systems and air filling stations.
- Radio protocols.
- Fabrication skills with various metals and plastics. Exposure to welding; Arc, Oxy-Acetylene, Mig, or Tig and Heli-Arc.
- Purchasing principles and basic supply contracts management.
- Basic computer programs (such as Microsoft Word, Excel and Internet use).
- Fundamentals of technological equipment necessary to be used in the performance of duties.
- Safety practices and procedures observed in the performance of work by Shop personnel.

### **Ability To:**

- Accurately diagnose and repair malfunctions in a variety of mechanical, hydraulic and electronic components.
- Complete acetylene and arc welds with proficiency.
- Work independently and understand and carryout verbal and written instructions.
- Perform moderate to heavy physical labor for extended periods.
- Respond promptly to call-backs.
- Receive, store, maintain, and issue a variety of equipment, supplies, and materials.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Operate a computer and other electronic equipment.

Working Conditions/Physical Demands: Work is performed indoors and outdoors, with exposures to inclement weather, dust, grease and noise; incumbent will have regular contact with staff and the public. The position may require prolonged sitting, standing, walking, reaching, twisting, turning, kneeling, bending, squatting, stooping, climbing, grasping, and repetitive hand movement and fine coordination. The incumbent should have normal manual dexterity and eye-hand coordination; and corrected hearing and vision to normal range, and must be able to lift, push, and pull objects weighing up to 50 pounds without assistance and 70 pounds with assistance. The incumbent will be driving Department vehicles. This position may be assigned to support mutual aid deployment throughout the State of California.

<u>Required License</u>: Must possess a valid, appropriate state of California driver's license at the time of hire. As a condition of employment, must acquire a California Class B Commercial license with a tank endorsement and no "Air Brake" restriction within six (6) months of employment. Must adhere to any drug and alcohol testing requirements as stipulated by the Federal Motor Carrier Safety Administration. Must maintain a safe driving record.

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<u>Tools:</u> Upon hire, must have personal hand tools suitable for the performance of duties.

<u>Pre-Employment Requirements</u>: The candidate will be required to complete and pass a background check, Live Scan fingerprint, and medical examination.