FIRE EQUIPMENT MECHANIC II

DEFINITION

Under general supervision, maintains and repairs Fire Department heavy and light 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 II is the journey level class in the Fire Equipment Mechanic series. Incumbents perform fully skilled tasks in the diagnosis, maintenance and repair of all fire apparatus and related equipment. This class differs from Fire Equipment Mechanic I in that the latter is the entry level class in the series. This class differs from Fire Equipment Mechanic Leadworker in that the latter is the advanced working/lead level classification.

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 apparatus pumps and valves, transmission mounts, brackets and clamps.

Rebuilds, repairs and maintains heavy duty air brake and hydraulic systems.

Diagnose and repair electronic systems and electrical wiring circuits.

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

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

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

Repairs and overhauls diesel and gasoline engines, ignition systems, drive train, brakes, suspension & steering, electrical, and HVAC systems, and performs preventative maintenance, using standard testing equipment.
Respond to road calls to repair fire equipment and other related equipment.

Maintains records of work performed and assists in the training of personnel.

Read 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.

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

**Ability to:**

Diagnose defects in heavy and light equipment.

Adapt available tools, test equipment 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 maintaining and repairing Fire heavy equipment, apparatus, and other related fire-fighting equipment.

AND

Possess three (3) valid certificates 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)

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 six (6) months must obtain and maintain:
- A valid Commercial Class B California Driver’s License with required endorsements and without air brake restriction; and
- Three (3) additional ASE certifications in the remaining T Series certifications:
  - Drive Train (T3)
  - Brakes (T4)
  - Suspension & Steering (T5)
  - Electrical/ Electronic Systems (T6)
  - Heating, Ventilation & Air Conditioning (HVAC) (T7)
  - Preventive Maintenance Inspection (T8)

Within one year of appointment, incumbents promoted or hired into the FEM II classification must obtain and maintain the California Office of the State Fire Marshal (OSFM) Fire Mechanic I certificate. Failure to obtain the required certification within the specified time period shall be cause for termination from this class. Please note: if the OSFM FEM I certification or examination is not available during the aforementioned time period, the timeframe to obtain may be extended by the Director of Personnel Services or designee but not to exceed
two years.

Within four (4) years of appointment as a Fire Equipment Mechanic II, incumbent shall become certified by the California Office of the State Fire Marshal (OSFM) as a Fire Mechanic II. All required ASE and OSFM Fire Mechanic Certifications shall be maintained for entire term of assignment. Failure to obtain the required certification within the specified time period shall be cause for termination from this class.

APPROVED: (Signature on File) __________________________ DATE: 4/19/2017 ______________
Director of Personnel Services

TJ:ar: 5/5/14
Revised: TJM:scm: 8/21/15
Revised TJM: SCM: KP: 4/5/17