

SENIOR MECHANIC

DEFINITION

To organize, assign, and review the work of assigned personnel engaged in skilled vehicle and equipment mechanical work related to gasoline, diesel, compressed natural gas (CNG), alternative fuel and electric powered automobile which may include light trucks, passengers, police, fire, electric utilities, public transit vehicles, and various medium and heavy equipment such as backhoes, loaders, pavers, street sweepers, and refuse collection vehicles.

DISTINGUISHING CHARACTERISTICS

This is the advanced class in the Mechanic series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed, complexity of duties assigned, independence of action taken, the amount of time spent performing the duties, and by the nature of the public contact made. Employees perform the most and responsible types of duties assigned to classes within this series, including provision of technical and functional supervision and performance of advanced journey level activities. Employees at this level are required to be fully trained in all procedures related to assigned areas of responsibility.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Fleet Services Supervisor.

Exercises technical and functional supervision over assigned mechanic staff.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Plan, prioritize, lead, train, review, and participate in the work of staff assigned to inspect, troubleshoot, diagnose, and identify mechanical, electrical, electronic, and hydraulic problems and defects; make repairs and adjustments to a wide variety of vehicles and equipment found in a municipal fleet environment,

Support schedules and methods to accomplish assignments provided by servicewriter ensuring all work is completed in a timely and efficient manner.

Participate in evaluating the activities of staff, recommending improvements and modifications.

Provide or coordinate staff training; work with employees to correct deficiencies.

Review the work of assigned crews engaged in vehicle and equipment mechanical work; inspect work in-progress; train personnel in the safe and proper operation of a wide variety of tools and equipment used in the work.

Lead, perform, and assist staff with the most critical, and complex work in troubleshooting,

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installation, repair, and maintenance of vehicle and equipment mechanical, electrical, electronic, and hydraulic maintenance duties, welding and fabrication work related to gasoline, diesel, electric or alternative fuel powered automobiles, light and heavy trucks, digger derricks, electric line equipment, fire apparatus, police vehicles, SWAT vehicles and equipment, hydraulic systems, power generation equipment, as well as, industrial and construction equipment.

Read, interpret and understand principles, methods, materials, procedures, blueprints, drawings, equipment specifications, vendor service manuals, logic diagrams and electric and hydraulic schematics used in the installation, testing, maintenance operations and modification of a wide variety of electrical and electronic equipment and devices.

Troubleshoot, diagnose malfunctions and repair, maintain and adjust mechanical, hydraulic, heating and air conditioning, safety equipment and devices on vehicles and equipment.

Document complex preventative maintenance principles and practices associated with the repair and maintenance of vehicles and equipment; update maintenance records.

Disassemble, reassemble, overhaul, tune-up, install, inspect, repair and calibrate gasoline, diesel, CNG, and alternative fuel engines, transmissions, light and heavy duty automatic and manual; repair and adjust clutch units, differentials, final drive units, suspension; replace ignition parts and clean and adjust carburetors; repair and replace components, power steering, tracks and related sprockets, rollers and idlers, hydraulic control systems, pumps, valves, pressure regulators, lines, hoses, and plumbing on multiple fluids.

Replace electrical equipment such as generators, starters, distributors, relays, lights and switches; diagnose and repair computer-controlled vehicle elements (i.e., K-9 unit vehicles) and replace components as needed.

Perform the more difficult mechanical fabrication, welding and machining of parts and tools as needed to modify and repair various vehicles and equipment including minor auto body repairs; assist in the installation, fabrication, and construction of various projects; read and interpret specifications and perform work accordingly.

Troubleshoot, diagnose, recognize, identify, repair, and maintain electrical equipment and vehicles including pulling cables, terminating wires, and modifying circuits on both A/C and D/C, electrical relays, alarm systems, transmitters, gauges, sensors, lighting, starters, circuit breakers, power meters, switches, generators, distributors and ignition components, and onboard computer modules.

Interpret control strategies and programmable logic controller programs to diagnose process and equipment failures with control and instrumentation equipment, network communications, fiber optic, Ethernet and 2-way radio, video and camera systems, mobile computer docking systems, hybrid and electric vehicle high voltage batteries (100v-800v), components contractors, inverters, converters, drive motors, control systems, charging interface and stations.

Respond to service calls for emergency road repairs.

Perform smog, Heavy Duty Inspection and Maintenance regulatory testing, and opacity testing as certified.

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Assess materials and labor needed to accomplish assigned jobs and estimate associated costs; ensure availability of supplies, materials, and equipment needed; request supplies and materials as necessary.

Maintain accurate records related to automotive mechanical work, including labor, material and equipment costs, and other work-related records.

Respond as appropriate and in collaboration with the Vehicle Maintenance Service Writer to comments and concerns expressed by internal customers regarding vehicle and equipment mechanical work progress and schedules.

Interact with customers to gain adequate information about issues regarding their specific types of equipment or vehicle in the aid of maintenance and repair.

Use a personal computer for purposes such as diagnosis of technical vehicle and equipment problems, researching product information, and entering and retrieving information related to work assignments and other record-keeping.

Build and maintain positive working relationships with co-workers, other City employees, and the public using principles of good customer service.

Perform related duties as assigned.

### MINIMUM QUALIFICATIONS

#### Knowledge of:

Principles and practices of lead supervision, training, and performance evaluation, including safety practices and related record-keeping.

Materials, methods, practices and equipment related to a broad range of vehicle and equipment mechanical, electrical, electronic, hydraulic maintenance, repair, and replacement activities in a full-service municipal fleet environment.

Operating principles of electric motors and engines fueled by gasoline, diesel, or alternative fuels.

Lubricating systems and oils, greases and attachments used in lubricating vehicle and equipment and related equipment.

Complex components of vehicle and equipment related to maintenance and repair and associated tools and uses.

Principles, practices, and methods of gas and electrical (MIG, TIG, GMAW, Oxy-acetylene brazing) welding and fabrication.

Electrical and hydraulic system theory.

Repair practices of Fire Apparatus, Fire support vehicles, compressed air refilling station, all maintenance and repairs in compliance with National Fire Protection Agency.

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Principles and practices of record keeping.

### Ability to:

Act as a lead worker and perform advanced journey-level mechanical maintenance, repair, and replacement activities in accordance with modern and sophisticated equipment and current standards.

On a continuous basis, know and understand mechanic repair and maintenance activities and observe safety rules; intermittently, analyze problem equipment; identify safety hazards; locate equipment; interpret work orders; train others to operate equipment; and explain jobs to others.

Intermittently, sit while studying or preparing reports; bend, squat, climb, kneel and twist when installing, repairing, and servicing equipment; perform simple and power grasping; pushing, pulling, and fine manipulation; and lift or carry weight of 50 pounds or more

Perform skilled work in the troubleshooting, maintenance, and repair of complex mechanical, electrical/electronic equipment related to vehicle and equipment gasoline, diesel, compressed natural gas, alternative fuel, and electric powered equipment.

Communicate clearly and concisely, both orally and in writing.

Operate equipment in a safe and efficient manner.

Respond to field requests for vehicle repair/maintenance.

Work regular shifts as assigned; may be assigned to call back and/or emergency schedules that include evenings, weekends, and/or holidays.

Keep records and make reports; use a personal computer to enter and retrieve data.

Establish and maintain effective working relationships with those contacted in the course of work.

### Experience and Training

#### Experience:

Two (2) years of experience performing work similar to that of Mechanic II in the City of Roseville.

#### Training:

Equivalent to completion of the twelfth (12<sup>th</sup>) grade, GED, or higher level degree.

### License or Certificate

Possession of a valid California Class B driver's license by date of appointment. Passenger and airbrake endorsements must be obtained within six (6) months of appointment.

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Eight (8) valid certificates as an Automotive Service Technician as issued by the National Institute for Automotive Service Excellence (ASE) by the date of appointment.

09-15-23

12-07-20

05-12-07

Senior Mechanic

07-18-01

Mechanic Leadworker