

## **MECHANIC**

### **DEFINITION**

Under general supervision, performs skilled inspection, diagnosis, repair, and maintenance of a variety of large and small vehicles and equipment, including electric, gasoline and diesel-powered equipment.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision of from the Director, Grounds & Transportation.

### **CLASS CHARACTERISTICS**

This is a journey-level mechanic position that performs the full range of duties required to ensure that District vehicles and equipment are maintained in a safe and effective working condition and provide the highest level of safety for staff use. Responsibilities include performing a wide variety of tasks in the inspection, maintenance and repair of vehicles and equipment in a timely manner. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. This class is distinguished from Lead Mechanic in that the Lead position is responsible for technical and functional supervision of assigned maintenance staff and is capable of performing the most complex duties assigned to the function.

### **EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only)**

1. Performs skilled mechanical work in the inspection, diagnosis, repair, and maintenance of a variety of large and small vehicles and equipment, including electric, gasoline and diesel-powered equipment.
2. Evaluates maintenance, servicing, and repair needs; reads and interprets schematics and diagrams; inspects and diagnoses mechanical malfunctions; maintains routine records of work performed.
3. Performs routine maintenance, safety checks and inspections; prepares vehicles for inspections; performs preventive maintenance to electric, gas and diesel systems.
4. Changes oil, transmission, brake, and other fluids according to prescribed procedures; follows laws, rules, and regulations regarding the disposal of hazardous waste.
5. Overhauls, rebuilds, and tunes engines and carburetors.
6. Overhauls, repairs, and adjusts automatic and standard transmissions, drive shafts, differentials, universal joints, gears, valves, transfer cases, and rear ends.
7. Diagnoses, repairs, and rebuilds engine electrical and ignition systems, such as distributors, coils, alternators, starters, and related systems.
8. Adjusts and replace brakes; maintains, rebuilds, and replaces air and hydraulic brake system components; changes and balances tires.

9. Diagnoses and repairs cooling, fuel, electrical, and exhaust systems; tunes engines using standard testing equipment.
10. Makes basic repairs of motors, engines, transmissions, differentials, chassis parts, electrical, fuel, ignition, cooling, steering, and hydraulic and air systems, including proper testing and adjustments.
11. Performs minor auto body and glass repairs.
12. Operates a variety of specialized electronic diagnostic equipment and machinery including a computer.
13. Performs preventive maintenance work on vehicles including inspections, lubrication and oil changes.
14. Utilizes fleet maintenance and work order system(s) to maintain, and repair vehicles.
15. Performs welding and fabrication on various types of machinery and equipment.
16. Performs repair work on other District equipment and systems as necessary.
17. Observes safe work methods and makes appropriate use of related safety equipment as required.
18. Operates a variety of hand and power tools and equipment related to work assignment as instructed.
19. Maintains work areas in a clean and orderly condition, including securing equipment at the close of the workday.
20. Maintains records on maintenance and repair work performed.
21. Assists Lead Mechanic with maintaining inventory to ensure most common items are in stock.
22. Operates equipment to test functionality of mechanical components as necessary.
23. Learns and applies emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.
24. Performs other related duties as assigned.

## **QUALIFICATIONS**

### **Knowledge of:**

1. Techniques, methods, materials, tools, and equipment used in the overhaul, servicing, and preventive maintenance of vehicles and equipment.
2. Operation, theory, and principles of electric, gasoline and diesel engines.
3. Methods, equipment, tools and materials used in the repair and maintenance of vehicles and equipment.
4. Diagnostic procedures for vehicles and equipment.
5. Technical aspects of analog and digital electronic equipment installed in vehicles.
6. Operation, maintenance and calibration of a wide variety of equipment, hand, shop, and power tools used in the work.
7. Automotive and equipment servicing and preventive maintenance practices.
8. Basic troubleshooting and repair principles and practices.

9. Federal, state, and local laws, regulatory codes, ordinances, and procedures relevant to the scope of work assigned mechanic positions.
10. Safe work methods and safety practices pertaining to the work.
11. Safe driving rules and practices.
12. Standard office practices and procedures, including the use of standard office equipment, basic record-keeping, and arithmetic.
13. English usage, spelling, vocabulary, grammar, and punctuation.
14. Techniques for providing a high level of customer service by effectively dealing with the public, vendors, students, and District staff, including individuals of various ages, disabilities, socio-economic and ethnic groups.

**Skills & Abilities to:**

1. Diagnose and repair a variety of mechanical and electrical problems of vehicles and equipment.
2. Read and comprehend schematics, fabricate special bodies, parts, and essentials as necessary.
3. Locate and diagnose problems using electronic and mechanical diagnostic equipment.
4. Accurately estimate time, materials and supplies necessary to complete repairs.
5. Service and perform preventative maintenance and repair on a variety of automobiles, trucks, and equipment.
6. Operate, maintain, and calibrate a variety of hand, power, and shop tools related to the trade.
7. Read and interpret instruction manuals and diagrams.
8. Safely and effectively use and operate hand tools, mechanical equipment, power tools, and equipment required for the work.
9. Interpret, apply, explain, and ensure compliance with applicable federal, state, and local policies, procedures, laws, and regulations.
10. Maintain accurate logs, records, and basic written records of work performed.
11. Operate modern office equipment including computer equipment and software programs.
12. Make accurate arithmetic calculations.
13. Operate a truck, and observe legal and defensive driving practices.
14. Organize own work, set priorities, and meet critical time deadlines.
15. Use English effectively to communicate in person, over the telephone, and in writing.
16. Understand scope of authority in making independent decisions.
17. Review situations accurately and determine appropriate course of action using judgment according to established policies and procedures.
18. Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

**Education and Experience:**

*Any combination of training and experience, which would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:*

Equivalent to the completion of the twelfth (12<sup>th</sup>) grade and two (2) years of responsible experience independently performing routine repair of automobiles, trucks, or power driven equipment.

**Licenses and Certifications:**

1. Possession of and ability to maintain a valid California Driver's License.
2. Possession of or ability to obtain an Environmental Protection Agency (EPA) Section 609 Technician Certification within probationary period.
3. Possession of valid A.S.E. Certification(s) for autos is desirable.

**PHYSICAL DEMANDS**

Must possess mobility to work in a standard shop setting and use and operate a variety of tools, power tools, equipment, and machinery; to operate a motor vehicle and drive on surface streets; to identify mechanical issues, to identify and locate parts and repair tools/equipment, to inspect, analyze, and diagnose problems with automobiles, trucks, and a variety of gasoline and diesel powered maintenance and construction equipment; strength, stamina, and mobility to perform medium to heavy physical work; vision to read printed materials and a computer screen to read various dials, gauges, and identify color-coded cables and wires; and hearing and speech to communicate in person and over the telephone. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate above-mentioned tools and equipment. Positions in this classification bend, stoop, kneel, reach, and climb to perform work and inspect work sites. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds and heavier weights with the use of proper equipment.

**ENVIRONMENTAL ELEMENTS**

Employees primarily work in the centralized maintenance shop and are exposed to loud noise levels, vibration, confining workspace, chemicals, dust, paint fumes, mechanical and/or electrical hazards, grease, oils, solvents, machinery with extremely hot surfaces and/or moving parts, and moving objects or other vehicles. Employees may interact with staff when trying to diagnose and/or resolve an equipment related problem.