

CLASS SPECIFICATION
Vehicle/Equipment Technician

GENERAL PURPOSE

Under general supervision, diagnoses, maintains, repairs and overhauls a wide variety of diesel, alternative fuel and gas-powered heavy and light vehicles and equipment; operates a variety of hand, power and shop tools; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Vehicle/Equipment Technician is the full journey-level class in the fleet services class series. An incumbent is responsible for maintaining, repairing and servicing a wide variety of motorized vehicles and equipment.

Vehicle/Equipment Technician is distinguished from Lead Vehicle/Equipment Mechanic in that incumbents in the latter class are responsible for providing lead work direction, guidance and training to incumbents in the former class.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class.

1. Diagnoses and performs major repairs and overhauls to gasoline, alternative fuel and diesel engines, involving inspection and replacement of broken or worn parts such as pistons, piston rings, valves, bearings, fittings, wrist pins and gaskets; inspects, troubleshoots, diagnoses, repairs, cleans, adjusts and installs fuel, ignition, electrical and cooling systems involving repair and replacement of such parts as carburetors, fuel injectors and injector pumps, spark plugs, starter motors, distributors, generators, computer controls, voltage regulators, wiring switches, batteries, radiators, thermostats and water pumps.
2. Diagnoses, repairs and adjusts steering mechanisms and other controls, checking and aligning wheels, including four-wheel drive vehicles.
3. Diagnoses, repairs and maintains vehicle and equipment air brakes, hydraulic systems and associated power take-off equipment; inspects, services and repairs air and hydraulic vehicle braking systems; diagnoses and repairs all aspects of hydraulic systems including pumps, motors, rams and controls.
4. Repairs vehicle body and chassis parts, using hand and power tools, electric arc and oxyacetylene welding equipment; machine lathes brake rotors and drums.
5. Performs welding work on vehicles, equipment and tools; modifies and fabricates metal parts for vehicles, equipment, tools, tanks, plates and grates; straightens and repairs bent vehicles, equipment and tools; fabricates and installs bumpers, tow bars, ladder racks, tool boxes and pipe railings.

6. Road tests vehicles; drives truck or equipment as required; inspects vehicles in the shop and field.
7. Services and repairs vehicle air conditioning systems.
8. Diagnoses engine electronic computer using scan tool and scope.
9. Smog checks and certifies vehicles.
10. Performs preventive maintenance and service work, including tune-ups, checking and replenishing fluid levels, and replacing hoses, belts, batteries, wiper blades, bulbs and lamps.
11. Reads and interprets manuals, drawings, blueprints, sketches and specifications.
12. Makes oral and written reports of work performed; completes forms and keeps accurate maintenance records.

OTHER DUTIES

1. Cleans shop and vehicle service areas and ensures supplies and equipment are maintained in orderly condition; orders parts and supplies as needed.
2. Performs emergency repairs in the field as needed.

QUALIFICATIONS

Knowledge of:

1. Methods, techniques, parts, tools and materials used in the overhaul, maintenance and repair of diesel- and gasoline-powered vehicles, including automatic and manual transmissions, brakes, suspension and steering systems.
2. Operation and maintenance of a wide variety of hand, power and shop tools and equipment common to the field.
3. Safe work methods and safety regulations pertaining to work.
4. Use and operation of oxyacetylene and electric arc welding equipment and materials.
5. Shop mathematics.
6. Practices and procedures of shop and field welding.
7. Welding properties of various metals and alloys.
8. Lubrication systems, including oils and greases used in servicing and maintaining vehicles and equipment.
9. Methods, techniques, tools and equipment used to align vehicles and equipment.
10. Federal, state and local laws and regulations pertaining to the handling and disposal of hazardous waste and clean air requirements.

Ability to:

1. Diagnose and repair a wide variety of diesel and gasoline-powered vehicles and related equipment.
2. Operate and maintain a wide variety of hand, power and shop tools and equipment used in the work.
3. Understand and follow oral and written instructions.
4. Exercise independent judgment and initiative without close supervision.
5. Prepare basic records and reports.
6. Read and interpret manuals, specifications and drawings.
7. Use shop mathematics to make calculations.
8. Fabricate and repair a wide variety of metal parts, equipment and tools.
9. Safe work methods and safety regulations pertaining to the work.
10. Establish and maintain effective working relationships with City management, staff, vendors and others encountered in the course of work.

Education, Training and Experience:

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from high school or G.E.D. equivalent; and two years of journey-level experience in the maintenance and repair of vehicles or construction equipment; or an equivalent combination of training and experience.

Licenses; Certificates; Special Requirements:

A valid California Class B driver's license and the ability to maintain insurability under the City's vehicle insurance policy. A California Class A driver's license is preferred.

PHYSICAL AND MENTAL DEMANDS

The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands

While performing the duties of this job, the employee is frequently required to use hands to finger, handle, feel or operate objects, tools or controls; and reach with hands and arms. The employee is occasionally required to climb or balance, stoop, kneel, crouch or crawl, walk, sit and talk or hear. The employee must regularly lift and/or move up to 50 pounds and frequently over 100 pounds.

Specific vision abilities required by this job include close vision, color vision and the ability to adjust focus.

Mental Demands

While performing the duties of this class, employees are regularly required to use written and oral communication skills; read and interpret data, information and documents; analyze and solve basic problems; use simple math and mathematical reasoning; observe and interpret situations; learn and apply new information or new skills; work under deadlines with interruptions; and interact with City management, staff, vendors and others encountered in the course of work.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The employee frequently works near moving mechanical parts or in outside weather conditions and is occasionally exposed to wet and/or humid conditions, fumes, toxic or caustic chemicals. The noise level is moderately noisy.