## CITY OF CARLSBAD CLASS SPECIFICATION

JOB TITLE: EQUIPMENT TECHNICIAN I EQUIPMENT TECHNICIAN II

DEPARTMENT: PUBLIC WORKS

**BASIC FUNCTION:** 

Under general supervision, to perform skilled technical diagnostic, repair and maintenance work on a variety of automotive, truck, tractors and other light and heavy power-driven equipment; and to perform other related work as assigned.

### **DISTINGUISHING CHARACTERISTICS:**

**Equipment Technician I** is the entry level class of the Equipment Technician series. Positions at this level perform a variety of semi-skilled and skilled maintenance and repair work. This entry level will supplement their technical knowledge by on-the-job training experience working with and under the supervision of journey level Equipment Technician IIs. Individuals employed in the Equipment Technician I class are expected to be reclassified to the Equipment Technician II level following successful job performance, demonstrated knowledge, skills and abilities through on-the-job training certification of proficiency levels through recognized training programs, and mandated state certifications as required by the job.

**Equipment Technician II** is the journey level position in the Equipment Technician series. Positions assigned to this class are expected to possess the complete knowledge, skills and experience to perform all types of complex technical work in the diagnosis, repair and maintenance of gas and diesel-powered equipment and their electronic parts. Equipment Technicians at this level work independently exercising judgment and initiative. An Equipment Technician II may also be expected to assist in the supervision and the training of less experienced personnel.

#### **KEY RESPONSIBILITIES:**

Inspect, diagnose and locate technical and electrical malfunctions on city automobiles, trucks, fire apparatus, water utility pumps, grounds maintenance equipment, and a variety of maintenance and construction equipment and their component systems.

Determine extent of necessary repairs for further repair work and scheduling, estimate parts and materials, requisition or order replacement parts, recommend contract work as necessary.

Overhaul, repair, maintain and adjust a wide variety of gas and diesel powered automotive, truck and heavy equipment and their component and computerized systems, including but not limited to engines, transmissions, clutches, differentials, fuel systems, generators, distributors and pumps, hydraulic systems, power plants, power trains and other equipment accessories and components, such as, heating and air conditioning units.

Operate and maintain a complete set of hand, power, and shop tools and computerized diagnostic and test equipment used in the automotive and truck repair trade.

Perform smog inspections; diagnose and repair smog inspection failures.

Perform general maintenance on cars, trucks and other equipment, including but not limited to grease and lubrication; batteries service; tire change and repair; replacement of spark plugs, light bulbs, fan belts and other simple technical parts; gas and oil service; wash and clean exterior and interior of vehicles; and other standard vehicle maintenance duties.

Read and interpret schematics, shop manuals, and other related materials in performing work assignments and to stay abreast of the current technology. Access technical information from automated databases.

Enter, retrieve, print and generate vehicle, equipment, and work order reports from computer information system; maintain equipment maintenance records.

Respond to emergency service calls for repairing or towing equipment that has broken down away from the shop.

Fabricate and modify parts and equipment.

Perform minor welding, braising, soldering and cutting operations.

Pick up and deliver vehicles as necessary; pick up parts and supplies as required.

Maintain work, time and material logs and records.

Assist other equipment technicians in the performance of major technical repairs as required.

Observe safe working practices; maintain a clean and orderly work and shop area.

Perform other related duties as assigned.

### **QUALIFICATIONS: (Cumulative at each higher level)**

## Knowledge of:

#### For Equipment Technician I:

- Procedures used in the repair and maintenance of gas and diesel-powered vehicles and equipment.
- Types and use of special tools and electronic test equipment common to the automotive repair trade.
- Methods used in electric and gas welding.
- Safe work practices, including handling of hazardous materials.

#### For Equipment Technician II:

- Practices, techniques, materials, tools and equipment used in the diagnosis, repair and modification of a wide variety of technical equipment, including automobiles, trucks, heavy equipment, specialized vehicles, i.e., fire apparatus, and their component systems.
- Preventive maintenance practices and techniques.

- Regulations, standards and guidelines pertaining to the work; including state and federal inspection guidelines.
- Current technology in repairing and diagnosing vehicles, equipment and their component systems.
- Operation and repair characteristics of the entire range of city-owned light and heavy equipment.

## Ability to:

## For Equipment Technician I:

- Inspect and correctly diagnose standard malfunctions in gas and diesel-powered equipment.
- Use with skill the tools and test equipment associated with the automotive and heavy equipment trade.
- Use gas and electric welding and cutting apparatus.
- Maintain computerized records.
- Perform minor and major technical repairs and adjustments within the time frames as established by flat rate manuals.
- Perform preventative maintenance and replacement functions.
- Prepare and maintain a variety of shop time keeping and repair records.
- Understand and follow oral and written instructions.
- Establish and maintain effective working relationships.

## For Equipment Technician II:

- Perform journey level equipment technician work on a wide range of vehicles and equipment.
- Estimate time and cost of repairs to within 10% of the actual costs.
- Read and interpret manuals, schematics, plans and specifications related to duties.
- Work independently in the absence of supervision.
- Assist in the training and supervision of less experienced personnel.

#### **EXPERIENCE AND EDUCATION:**

Any combination equivalent to the experience and education that could likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

### **Equipment Technician I:**

One year experience performing journey-level automotive maintenance and repair duties.

Specialized training or course work and certification in the maintenance and repair of gas and diesel-powered equipment.

# **Equipment Technician II:**

Five years of progressively responsible experience and proficiency performing diagnostic and repair duties on a wide variety of vehicles and equipment including both diesel and gas-powered equipment and their component electronic and computerized systems.

Specialized training and certification in the maintenance and repair of gas and diesel powered equipment and component systems. Training equivalent to the National Institute of Automotive Service Excellence (ASE) Certified Automotive and/or Truck Technician tests are highly desirable.

#### **SPECIAL REQUIREMENTS:**

## **Equipment Technician I:**

Possession of a valid California Class C Driver's License is required to drive vehicles during the course of performing the required duties of the position.

## **Equipment Technician II:**

Possession of or ability to obtain within six months of employment, a valid California Class A Driver's License which is required to drive commercial vehicles during the course of performing the required duties of the position.

Possession of or ability to obtain within the first year of employment, a CA Smog Technician license.

As regulations change, incumbents are expected to obtain the State-mandated certifications required in order to work on certain vehicles, equipment or in handling materials. These certifications will be designated and specified at the time of hire or as the requirements become necessary to perform the duties of the position.

### PHYSICAL STANDARDS:

Incumbents in this class series must stand, bend, stoop and hold awkward body positions for long periods of time in order to inspect and repair a variety of equipment. Must possess sufficient strength and stamina to lift, carry and manipulate objects, e.g., motors, equipment parts, tools, weighing up to 40 pounds. The work environment is in a garage which is exposed to heat, cold, dirt, dust, exhaust fumes and other potentially toxic materials. Incumbents must periodically pick up, deliver, and test drive equipment as a part of the essential duties of their jobs.

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