



## CLASS SPECIFICATION

02-12-04

### EQUIPMENT MECHANIC, 3711

**Summary of Duties:** Employees in this class perform skilled mechanical, electrical, and related work in the maintenance and repair of transportation equipment; inspect equipment to determine needed repairs; or work with and supervise a small group of employees doing such maintenance and repair work; and does related work.

**Distinguishing Features:** The work of an Equipment Mechanic is confined mainly to the maintenance and repair or inspection of automotive equipment used for transportation rather than construction purposes. Work is usually assigned by written order, and may be inspected after completion. Little supervision is exercised over the details of work execution and techniques employed, but a supervisor may give advice and approve the use of new parts.

**Examples of Duties:**

- Repairs, inspects and tests transportation equipment such as passenger cars, trucks, trailers, motor flushers, motorcycles, refuse collection, bulky item vehicles and their auxiliary hydraulic systems, and other transportation equipment to determine needed repairs;
- Diagnoses internal combustion engine malfunctions, noises or failures;
- Removes, repairs, overhauls, and installs engines and transmissions, including heavy duty automatic transmissions;
- Slings and rigs equipment;
- Inspects, adjusts, and replaces necessary units and related parts, including valves, pistons, gears, and bearings;
- Repairs and replaces oil, water, and fuel pumps;
- Cleans and repairs carburetors and fuel systems, including diesel fuel systems;
- Restores and hones cylinders and fits pistons, piston rings, and piston pins;
- Grinds valves;
- Relines and adjusts clutches;
- Repairs and overhauls chassis units, including brake systems, such as hydraulic and air differentials;
- Works on brake boosters and valves;
- Trues brake drums and brake rotors;
- Fits and adjusts brake shoes;
- Repairs and overhauls hydraulic pressure systems;
- Overhauls and aligns front ends;
- Repairs power steering units;
- Overhauls steering gear;

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- Repairs vehicle air conditioning units;
- Repairs exhaust emission control systems;
- May repair speedometers;
- May balance wheels;
- Tunes engines;
- Makes compression tests;
- Tests coils, condensers, distributors, and other electric parts;
- Tests and repairs computer controlled ignition systems and electronic fuel injection systems;
- Tests ignition circuits and times camshafts and ignitions;
- Road tests automotive equipment for proper performance;
- May install or replace electric wiring and lamps;
- May repair starters, generators, and alternators.
- Prepares shop orders authorizing repairs;
- Tests and inspects equipment after completion of shop repairs to determine that it is in satisfactory operating condition, corrects minor faults during inspections;
- May be required to use a terminal or personal computer;
- Makes minor repairs such as replacing glass, repairing door locks, and repairing seat adjustment mechanisms;
- May drive a tow truck or a pick-up truck and make emergency repairs in the field;
- Uses an emissions analyzer dynamometer, exhaust analyzer, dwell meter, compression gauge, vacuum gauge, fuel pump pressure gauge, wheel alignment gauge, drill press, hydraulic press, cylinder boring bar, valve refacer, valve seat refacing machine, bench grinder, hone, connecting rod aligner, pin fitting machine, drum lathe, micrometer, and other machine and hand tools of the trade;
- Maintains mower decks and reels on all mowing equipment;
- Occasionally uses a lathe in a restricted manner;
- Occasionally does acetylene and electric welding and brazing;
- May fabricate and install special equipment and parts on vehicles;
- May provide direction to and oversee the work of a helper engaged in repair work;
- May occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

**Qualifications:** The incumbent must have the following knowledges and abilities:

#### **A good knowledge of:**

- Methods, materials, machinery, tools, and equipment used in the inspection, testing, diagnosis, repair, tune-up, maintenance, and overhaul of transportation equipment such as automobiles, trucks, trailers, motorcycles, and refuse collection vehicles;
- Occupational hazards in an equipment repair shop and appropriate safety precautions and devices;
- Operation requirements of a wide variety of transportation equipment;
- Preventive maintenance practices and methods;
- Sources of information on operating, maintenance, and repair problems;
- Welding and brazing practices and processes.

**The ability to:**

- Diagnose trouble and mechanical failures in automotive equipment to determine the necessary repairs;
- Make routine reports and keep routine records;
- Deal tactfully and effectively with other employees;

**Minimum Requirements:**

1. Completion of a recognized apprenticeship as an automotive mechanic; **or**
2. Four years of full-time paid experience in automotive mechanic work; **or**
3. Satisfactory completion of a two-year program in automotive or truck mechanics in a recognized community college, trade, or technical school **and** two years of full-time paid experience in automotive mechanic work; **or**
4. Satisfactory completion of an Equipment Mechanic training program while employed as a Craft Trainee for a City Department.

**NOTES:**

1. Applicants filing under Requirement Number 1 must submit an apprenticeship certificate.
2. Applicants filing under Requirement Number 4 must submit a certificate of program completion with their application.

**License:** A valid Class A or B California driver's license is required. For some of the positions in these classes a valid California Class A, Class B, and/or Class C driver's license is required. Some positions may require a valid California Bureau of Automotive Repair Lamp Adjuster License, Brake Adjuster License, Qualified Test and Repair Mechanic License, and/or other licenses required by law for performing specific functions. Some positions may require obtaining a forklift and/or crane operator's license through "In-House" training and testing.

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depend, in part, on the specific requirements for the job, the limitations related to the disability, and the ability of the hiring department to reasonable accommodate the limitation.

**As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory, and not restrictive. It is not intended to declare what the duties and responsibilities of any position shall be.**