

COUNTY OF SOLANO CLASS SPECIFICATION EQUIPMENT MECHANIC

CLASS SUMMARY:

Under general supervision, independently diagnosis , makes mechanical and electrical repairs to light and heavy equipment and vehicles

DISTINGUISHING CHARACTERISTICS:

This is a journey level equipment mechanic class performing a wide variety of diagnostic and mechanical repairs to County equipment in the shop, and in the field.

SUPERVISION RECEIVED AND EXERCISED:

- Supervision is provided by a Fleet Services Supervisor; may receive consultation and /or advice from other Equipment Mechanics.
- No supervision is exercised over others

ESSENTIAL DUTIES: This class specification represents the core area of responsibilities; specific position assignments will vary depending on the needs of the department.

- Using computers, analyzers and a variety of hand and power tools, inspects, diagnoses, road tests, and performs a variety of mechanical and electrical repairs to County vehicles, trucks and heavy construction equipment such as:
 - repairing engines by tuning, overhauling and/or replacing components;
 - repairing, overhauling and/or replacing standard or automatic transmission parts including clutches and drive shafts;
 - repairing front and rear axles including all gears and bearings;
 - repairing fuel system components including carburetors, fuel pumps, filters, hoses, and emission controls;
 - repairing brakes by overhauling or replacing brake shoes, springs, hardware, wheel cylinders and related parts in disc and air brake systems, brake drums and rotors;
 - repairing suspension in steering systems, aligning front and rear suspensions;
 - repairing electrical systems and installing new wiring;
 - fabricating, repairing, installing, and maintaining emergency/specialty equipment installed on County vehicles;
 - repairing heating and air conditioning systems.
- Makes major repairs to other types of County equipment such as chainsaws, mobile and/or portable generators, tank sprayers, etc.
- Completes scheduled preventative maintenance and comprehensive safety inspections on County vehicles; performs smog inspections and associated tune-ups.
- Conducts field service calls, sometimes in adverse conditions.

- Provides guidance and consultation to other workers and conducts training for Equipment Service Workers, etc.
- Prepares work orders, procures repair parts, interacts with vendors, etc.
- Performs other duties as assigned.

EDUCATION AND EXPERIENCE:

- **Education:** High School Diploma, GED, or equivalent; **AND**
- **Experience:** Four years of full-time paid experience in performing engine repairs on vehicles and/or heavy equipment.

Note: Possession of an Associate's degree or higher with a major in automotive repair or an apprenticeship program in automotive repair is desired.

LICENSING, CERTIFICATION AND REGISTRATION REQUIREMENTS:

- Applicants are required to possess a valid California Driver's License, Class C. A valid Class A California Driver's Licenses may be required depending on the assignment within 6 months of appointment.

Note: The driver's license must be kept current while employed in this class.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Knowledge of:

- Laws, regulations, policies and procedures consistent with automotive and heavy equipment services.
- Theory and operation of vehicular engines; air conditioning and heating systems; emission control systems and standards; and fuel, cooling, electrical, drivetrain, clutch and brake systems.
- Operation, diagnosis, and repair of light and heavy equipment.
- Proper and safe use and maintenance of hand and power tools used for complex vehicle and heavy equipment maintenance.
- Preventative maintenance, repair parts, supplies and equipment of vehicles and heavy equipment.
- Proper welding techniques
- Safety practices used in mechanical repair.
- Customer service techniques for dealing with customers.
- Standard office procedures, practices, equipment, personal computers, and software.

Skill and/or Ability to:

- Identify and analyze mechanical and electrical problems in vehicles and heavy equipment and implement repairs.
- Analyze, and properly adjust engine emissions control equipment.
- Diagnose and repair faulty components.
- Use original equipment manufacturer (OEM) and other diagnostic equipment.

- Use hydraulic, vacuum hydraulic and air brake systems.
- Read and understand manuals, diagnostic charts, specifications and measuring tools.
- Use special equipment, gages, meters, and tools used in the equipment repair trade.
- Improvise and make repairs under adverse field conditions.
- Follow safe working procedures.
- Communicate effectively both verbally and in writing.
- Demonstrate tact and diplomacy.
- Follow oral and written instructions and prepare simple reports;
- Recognize conditions which adversely affect vehicle safety, such as defects in the brakes, tires and steering systems.
- Safely drive vehicles and operate other equipment that has been serviced/repaired.
- Understand, interpret and apply applicable laws, regulations and policies and use good judgment.
- Establish good relationships with the public and internal customers.
- Maintain accurate records and document actions taken.
- Perform a variety of technical and specialized tasks and functions in an independent, competent and timely manner.
- Use modern office equipment to include computers and related software applications.
- Operate and maintain a variety of hand and power tools properly and safely.

PHYSICAL REQUIREMENTS:

- **Mobility and Dexterity:** This class typically requires employees to perform the following: (1) balancing, stooping, kneeling, reaching, crawling, fingering, grasping, and repetitive motion; (2) climbing and working safely on ladders and step ladders with a total weight that does not exceed the weight capacity of the ladder; and (3) standing or walking for extended periods of time on uneven surfaces.
- **Lifting, Carrying, Pushing and Pulling – Heavy work:** This class typically requires employees to perform the following: exerting up to 100 pounds of force occasionally with assistance, and/or up to 50 pounds of force frequently, and /or up to 20 pounds of force constantly to move objects.
- **Vision:** This class requires employees to have close visual acuity, with or without correction, to prepare and analyze data and figures, view a computer terminal, read, and to distinguish between normal and off shade colors and to read gauges and meters in dimly lighted areas etc. Employees are also required to have depth perception and good eye-to-hand coordination in order to operate a motor vehicle and to operate a variety of hand and power tools.
- **Hearing/Talking:** This class requires employees to perceive the nature of sounds at normal speaking levels with or without correction, and have the ability to receive detailed information through oral communication. Employees in this class are also required to be able to communicate to express or exchange ideas. Detailed or important instructions must occasionally be conveyed to others accurately, loudly, and/or quickly.
- **Other:** This class typically requires employees to have sufficient sense of smell, and touch to observe equipment functions for normal and abnormal occurrences.

WORKING CONDITIONS:

- **Outdoor Work:** Employees in this class will often be working outdoors and thus may be subject to exposure to intense noises, fumes, odors, pollens, dust, inadequate lighting, and to unpleasant field conditions including rainy, windy, cold, or hot weather; may be exposed to insects, rodents, snakes, bees, wasps, spiders, ants, etc.
- **Work in an Industrial Area:** Employees in this class will often be working in an industrial area and thus will be subject to exposure to moving mechanical parts, electrical currents, toxic agents, fuel, oil, gases, smoke, fumes, odors, dust, and vibrations; employees may be subject to injuries when working with hand and power tools and equipment.
- **Traffic Hazards:** Employees in this class will be required to operate a vehicle and thus may be subject to traffic hazards while driving.

OTHER REQUIREMENTS:

- **Background Checks, Reference Checks and Physicals:** The County may conduct a background check, a reference check and a physical on candidates prior to appointment to a position within this class.
- **Independent Travel:** Incumbents are be required to travel independently, for example, to test drive vehicles that have been repaired/serviced, to shuttle vehicles to vendor repair locations, to pick up repair parts, etc.
- **Hours of Work:** Incumbents may be required to work weekends, holidays, irregular hours, on-call, and after normal business hours.
- **Drug and Alcohol Testing:** Candidates applying for positions in this class are subject to, drug and alcohol testing as required under the Federal Omnibus Transportation Employee Testing Act of 1991. Testing of incumbents includes post-accident, as well as random and reasonable suspicion testing as required by law.

CLASS HISTORY AND CLASS INFORMATION:

- **Date Approved by the Civil Service Commission:** November, 2000
- **Date Adopted by the Board of Supervisors:** November, 2000
- **Date(s) Revised:** September, 2016
- **Class Code:** 873020