

CLASSIFICATION NO. 432 Revised: 9/75, 7/94, 9/07 FLSA: Non-Exempt

EEO: 7

#### **MECHANIC**

### **CLASS CHARACTERISTICS**

Under general supervision, to inspect, repair, overhaul and maintain automobiles and light trucks or medium and heavy trucks and road construction equipment; and to do other work as required.

# **DISTINGUISHING CHARACTERISTICS**

The Mechanic repairs and replaces defective and damaged parts and systems, maintains vehicles or equipment in safe and efficient operating condition, and may perform emergency repairs to vehicles or equipment in the field. Automotive Mechanics within the Fleet Services Division of the Finance Department work on gasoline, diesel, or alternative fuel powered automobiles and light trucks, including police cars, motor pool cars and pickup trucks. Equipment Mechanics within the Transportation Maintenance Division of the Department of Transportation and Development work on gasoline or diesel-powered light through heavy vehicles and equipment, including trucks, pavers, loaders, sweepers, rollers, graders, excavators, plows, sanders, de-icers and various power tools and small equipment.

The Mechanic differs from the Mechanic, Senior which leads the work of mechanics and other service and repair personnel.

# TYPICAL TASKS

Duties may include but are not limited to the following:

- Diagnoses, repairs and overhauls engines, drive trains, suspensions, steering, differentials, gear boxes, clutches, transmissions and hydraulic systems; removes, adjusts, replaces and/or repairs worn or defective parts such as pistons, rods, gears, valves and bearings; builds specialized equipment to meet specific needs; performs limited welding and fabrication.
- 2. Performs preventive maintenance, routine servicing, engine tune-ups and repairs; inspects, adjusts and replaces parts; removes and replaces ignition and charging system components including spark plugs, distributor cap and breaker points, pick-up and ignition coils, hall effect switch, secondary ignition cables, alternator and generator; sets dwell and timing; adjusts flow of air and gasoline through carburetor to set idle speed and comply with emission standards; examines battery and connections and electrical system starting and charging circuits; adjusts and replaces fan belts; performs complete lubrication.
- 3. Tests, diagnoses and repairs electrical systems; installs and wires lighting systems; rewires ignition systems, lights and instruments panels; examines battery and connections and electrical charging and starting circuits.

- 4. Inspects, tests and repairs cooling and fuel systems; repairs or replaces water pumps and hoses; flushes radiator with cleaning compound and solders leaks; tests and analyzes electrical, vacuum, pressure and related functions of system components; replaces faulty thermostats; repairs or replaces fuel pumps, injectors, fuel lines and carburetors; tests, diagnoses and repairs mechanical and electronic fuel injection systems.
- 5. Inspects, adjusts, repairs and overhauls brakes; replaces brake shoes or attaches new linings; refaces or replaces brake drum; repairs or replaces leaky cylinders; adjusts drum/shoe clearance; replaces or repacks wheel bearings; fills brake master cylinder with brake fluid; bleeds air from brake lines.
- 6. Aligns front end, wheels, axles, frames and steering; straightens frame, axle and steering rods, adjusts shims, tie rods and joining pins or installs new parts; places counterweights on wheels to balance; installs or repairs shock absorbers and mufflers.
- 7. Documents time and material usage and current vehicle condition for each project either manually or using computerized systems; makes and documents recommendations for needed future maintenance and repairs; records costs for parts and equipment; maintains an organized and clean maintenance shop.

Within the Equipment Mechanic specialty:

8. Repairs, rebuilds and maintains road construction vehicles and equipment; operates and inspects machines and equipment to determine nature and extent of damage or malfunction; dismantles and reassembles equipment; identifies and replaces damaged or worn parts; inspects, adjusts and repairs air brake systems, hydraulic systems, material application systems and accessories; tests overhauled equipment to ensure operating efficiency; welds and fabricates miscellaneous parts and frames.

Within the Automotive Mechanic specialty:

- 9. Services and repairs temperature control units; replaces worn or broken parts and recycles air-conditioning refrigerant; measures compressor pressure to determine efficiency; tests, diagnoses and repairs electronic and computer control systems; performs diagnostic inspection of engines using electronic or mechanical analyzing equipment.
- 10. Conducts state required testing, certifications and annual inspections on vehicles; tests and adjusts emission control systems and records and evaluates data; calibrates, cleans and maintains test equipment and recording devices; completes required forms for state review.
- 11. Modifies and details new vehicles for use as Sheriff patrol cars; installs and wires lights and light bars, sirens, screens and other accessories; paints and applies decals and identification marks.

### REQUIRED KNOWLEDGE AND SKILLS

<u>Working Knowledge of:</u> Methods, materials and practices used in vehicle/equipment maintenance, inspection and repair; design and operation of motor vehicles, hydraulics, accessory power equipment and computer control systems; occupational hazards and safety precautions; Federal, State and County regulations applicable to maintenance specifications,

safety and environmental quality; safe operation of vehicle repair and maintenance equipment; basic math; basic record keeping techniques; customer service techniques.

Skill to: Inspect, maintain, repair, and adjust light or medium and heavy duty vehicles/equipment; follow detailed oral and written instructions, schematics and diagrams; operate a variety of tools and equipment to repair and adjust vehicles and/or equipment, including mechanical and electrical diagnostic equipment, calipers, gauges, hydraulic jack, chassis aligner, lathes, drill presses and welding equipment; complete and maintain repair and maintenance records; establish and maintain effective working relationships with County and other agency employees; communicate effectively, both orally and in writing.

# **WORKING CONDITIONS**

Duties require frequent walking, kneeling, bending, twisting, grasping, and fine motor control.

Within Finance Department's Fleet Management Division (Automotive Mechanic), duties also require the ability to lift up to 90 pounds, carry up to 40 pounds, and push/pull 80 pounds.

Within DTD's Transportation Maintenance Division (Equipment Mechanic), duties also require frequent standing, reaching, squatting, balancing, climbing, and the ability to up to lift 100 pounds, carry up to 75 pounds, and push/pull 75 pounds. Duties also involve frequent exposure to confined spaces, loud noises, vibration, dust, fumes, chemicals, heat, slippery and/or uneven surfaces, adverse weather conditions, poor visibility/low lighting, and working on top of vehicles/equipment.

# **MINIMUM QUALIFICATIONS**

Minimum qualifications are used as a guide for establishing the minimum experience, education, licensure, and/or certifications required for employment in the classification. The following minimum qualifications are established for this classification. Additional minimum qualifications and special conditions may apply to a specific position within this classification and will be stated on the job announcement.

**Experience:** A minimum of one (1) year of related experience that would provide the required knowledge and skills to perform the responsibilities of this position.

#### Licenses/Certifications:

The following licensure/certifications are required at the time of hire.

 Some positions require Department of Environmental Quality Inspection Certification issued by the State of Oregon.

# PRE-EMPLOYMENT REQUIREMENTS

Driving is required for County business on a regular basis or to accomplish work. Incumbents must possess a valid driver's license. Heavy equipment positions require possession of a valid Class B Commercial Driver's License (CDL) with no restrictions in order to drive manual transmission and full air brake vehicles within 1 year of hire. Incumbents must possess and maintain an acceptable driving record throughout the course of employment.

Positions within Fleet Services Division must successfully pass a criminal history check which may include national or state fingerprint records check.

Must pass a pre-employment drug test (DOT Regulations for CDL).

Employment is contingent upon passing a post-offer physical assessment. Accommodation requests will be reviewed on an individual basis in compliance with State and Federal legislation.

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