

# **HEAVY EQUIPMENT MECHANIC**

### **CLASS CHARACTERISTICS**

Under general supervision, to maintain, repair, modify, and restore medium (GVWR 10,500-26,600 lbs.) and heavy (GVWR greater than 26,000 lbs.) maintenance and construction equipment and power generation equipment; and to do other work as required.

#### **DISTINGUISHING CHARACTERISTICS**

The Transportation Maintenance Program within the Department of Transportation and Development maintains the County's roads, bridges, culverts, buildings, traffic markings, signs, signals, and equipment related to the County's road, bridge, traffic, and ferry systems.

The Heavy Equipment Mechanic completes inspections, initial diagnoses, maintenance, repairs and modifications of heavy maintenance and construction equipment. The work is usually unplanned and often completed in unfavorable environmental conditions in the field.

The Heavy Equipment Mechanic differs from the Heavy Equipment Mechanic, Senior which leads the work of Heavy Equipment Mechanics and other service and repair personnel. The Heavy Equipment Mechanic also differs from the Automotive Mechanic which inspects, diagnoses, maintains, repairs and modifies fleet equipment comprised of a variety of light and medium automotive and maintenance equipment.

#### **TYPICAL TASKS**

Duties may include but are not limited to the following:

- Repairs, modifies, and restores medium and heavy maintenance and construction equipment, and power generation equipment including diesel and gasoline powered engines and generators, single and tandem axle dump trucks, motor graders, asphalt paving equipment, backhoes, forklifts, cranes and bucket trucks, diesel powered snow blowers, water trucks, front end loaders, tractor/trailer combination, tracked and truck mounted excavators, dozers, and pavement grinding machines.
- 2. Repairs, rebuilds, replaces or restores chassis and component parts, brakes, clutches and transmissions, engines, pneumatic and hydraulic brake systems, high and low voltage electrical systems, fuel injection systems, fuel pumps, high pressure pumps and carburetors.
- 3. Designs and fabricates mechanical apparatus such as truck mounted tanks, battery holders, toolboxes, utility bodies, snow plows and mounting brackets for lights and signs; designs, organizes and orders appropriate materials; welds sections together and mounts apparatus on equipment.

4. Determines the cause and extent of component or system failure through test drives, pressure and temperature checks, disassembly, inspection, use of computerized and electronic diagnostic equipment, and reference to technical manuals, blueprints, and schematic manuals; verifies parts required for repairs by researching parts manual

## 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 match; basic record keeping techniques; customer service techniques.

Skill to: Safely use the tools associated with the repair of diesel and gasoline powered engines. single and tandem axle dump trucks, motor graders, chip spreaders, backhoes, diesel powered snow blowers, water trucks, front end loaders, tractor/trailer combinations and pavement grinding machines; safety work around, in, and under heavy equipment; safely work with chemicals, solvents, and exhaust fumes; read, understand and apply motor vehicle codes relating to vehicle height, weight, width, length, and lighting requirements; safety manuals, schematics, service alters and instructions; requirements (structural and other) found in the American National Standard Institute's manual; environmental rules and regulations relating to vehicle exhaust and spray requirements; vehicle safety rules in Oregon Administrative Rules, Chapter 437 (OSHA regulations); diagnose equipment malfunctions accurately using mechanical, electrical, or electronic testing equipment; repair a variety of heavy equipment and their auxiliary electrical, electronic, mechanical, hydraulic, or structural components; use welding and other shop equipment to fabricate or modify equipment or component parts; move parts and equipment safely using appropriate processes and procedures; work cooperatively as a member of a team; communicate effectively, both orally and in writing; establish and maintain effective working relationships with County employees and the public.

#### WORKING CONDITIONS

Duties require frequent standing, walking, kneeling, bending, squatting, balancing, climbing, twisting, reaching, grasping, fine motor control, and the ability 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 (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.

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.

#### POST-EMPLOYMENT REQUIREMENTS

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 one (1) year of hire. Incumbent(s) must possess and maintain an acceptable driving record throughout the course of employment.