

## **HEAVY EQUIPMENT MECHANIC I**

### **DEFINITION OF WORK**

Positions in this class perform semi-skilled and skilled mechanical work in the repair and maintenance of heavy construction equipment and automotive vehicles. Assignments are normally received in the form of written or verbal work orders, which usually indicate the general nature of the task or describe the nature of the problem. New or unusual assignments may be accompanied by more detailed instructions. Work is performed under general supervision and may be reviewed and inspected in progress or upon completion. Positions assigned to this classification are distinguished from the Heavy Equipment Mechanic II and the Heavy Equipment Master Mechanic by level of diagnosis and repair work performed. Employees in this class normally perform work on the less complex mechanical systems and ancillary components/equipment and spend more time on service and inspection activities.

### **EXAMPLES OF WORK**

Employees perform a range of tasks involving the service, inspection, repair, rebuild, and diagnosis of a number of mechanical systems for a variety of gasoline, diesel, and alternative powered engines/equipment. Work ranges from inspection and service to moderately complex mechanical systems analysis using diagnostic instruments. Standard operational guidelines, shop safety procedures, vendor manuals and manufacturer publications and bulletins are normally established and positions apply technical knowledge and skills, occasionally modifying standard practice and procedures due to unusual situations. Employees must routinely determine materials, techniques, and tools to accomplish work assignments. During routine maintenance employees inspect equipment, change oil, hydraulic fluid, air filters, and when required change fuel filter or transmission filter. Employees may remove or replace tires and/or brakes; make visual inspection of drive line and note faults discovered; inspect ground engagement tools and cutting edges for wear on dozer; check track pads, rollers and links for wear or missing bolts; inspect battery and cables for tight connection; check all lights, reflectors, and back up alarm; drain/refill engine oil, check coolant level, transmission fluid and fill as needed; check hydraulic hoses, cylinders and tanks for leaks; and inspect drive belts for proper tension, and locks for frays or cracked condition. Employees perform a variety of diagnosis, maintenance and repair activities on various pieces of equipment including but not limited to heavy duty trucks, excavators, high pressure pumps, 25 to 30 ton dump trucks, small to large bulldozers, earth graders, cranes, and backhoes. Employees diagnose problems in disassembling unit, repair or replace parts as needed, and reassembles units involving mechanical systems such as brakes, cooling, drive, electrical, exhaust and emission control, heating and air conditioning, hydraulic, air, and steering and suspension. Employees perform related work as required.

### **EMPLOYMENT STANDARDS**

#### **Education and Experience:**

High school or General Educational Development diploma and two years of experience in the repair of vehicles and/or heavy equipment; or an equivalent combination of education and experience.

**Knowledge, Skills, and Abilities:**

Knowledge, skills, and ability to perform a variety of recurring and related tasks using steps and processes that are readily understood and that are associated with less complex systems and components. Examples: inspection and replacement of brake pads and shoes; and replacement of regulator, alternator, and belts. Thorough knowledge of the standard practices, tools, materials and equipment used in the diagnosis, repair and maintenance of a variety of gasoline and diesel powered vehicles and heavy equipment; and operating principles of gasoline and diesel engines, and of the standard mechanical components of automotive and related equipment. Considerable knowledge of the occupational hazards and safety precautions of equipment repair work and shop operations. Skill in the use and care of tools, equipment, and materials used in the diagnosis, maintenance and repair of automotive, heavy construction and related equipment. Ability to read manuals and wiring schematics; exercise analytical judgment in detecting malfunctions in mechanical equipment; understand and follow oral and written instructions; assist other mechanics; perform the manual labor associated with mechanical repair work; and establish and maintain effective working relationships.

**SPECIAL REQUIREMENTS**

Must have and maintain a valid NC Class A CDL driver's license with HAZMAT endorsement with an acceptable driving record and a law enforcement background check. Possession of Automotive Service of Excellence (ASE) certification in brake systems and preventive maintenance inspections preferred. Certified in CFC recovery to be completed within one year of hire. Requires drug screening test and receipt of negative results for the use of drugs specified by County policy. Must meet industrial physical examination for sight, hearing, cardiovascular, pulmonary, chest x-rays, blood pressure, blood sugar and lead levels, chemistry profiles such as cholesterol and liver functioning, etc., prior to employment. Must possess a master mechanics tool set.

**ADA REQUIREMENTS**

Employees are subject to hazards while working inside the shop, in confined spaces, while exposed to heavy machinery and during times working in an outside environment. Employees may be exposed to various hazards such as loud noises, and hazardous spills with fumes, oils, gases, or flammable liquids. Work may subject employee to compliance with final OSHA standards on bloodborne pathogens.

**PHYSICAL REQUIREMENTS**

Some duties require movement of heavy objects, sometimes within very confined spaces. Must be able to physically perform the basic life operational functions of standing, walking, hearing, kneeling, reaching, feeling, grasping, pushing, pulling, bending, climbing, crawling, fingering, and performing repetitive motions. Must be able to perform medium work exerting up to 100 pound of force occasionally; 50 pounds frequently; and 20 pounds constantly. Must possess the visual acuity to perform repair work and to operate vehicles and equipment.

