

**County of Humboldt Job Specification
Heavy Equipment Technician I/II
Classification 0224A/B
FLSA: Non-Exempt**



DEFINITION

Under immediate (Heavy Equipment Technician I) to general (Heavy Equipment Technician II) supervision, inspects, maintains, repairs, and services heavy and light road maintenance and construction equipment; operates a variety of hand, power, and shop tools; prepares and maintains records of service and repairs and time and materials used in each project; and performs related duties as assigned..

SUPERVISION RECEIVED AND EXERCISED

Receives immediate (Heavy Equipment Technician I) to general (Heavy Equipment Technician II) supervision from Heavy Equipment Maintenance Supervisor. Exercises no direct supervision over staff.

CLASS CHARACTERISTICS

Heavy Equipment Technician I: This is the entry-level classification in the Heavy Equipment Technician series. Initially under close supervision, incumbents learn and perform routine maintenance and repair of a wide variety of motorized equipment. As experience is gained, assignments become more varied, complex, and difficult; close supervision and frequent review of work lessen as an incumbent demonstrates skill to perform the work independently. Positions at this level usually perform most of the duties required of the positions at the II level but are not expected to function at the same skill level and usually exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise.

Heavy Equipment Technician II: This is the fully qualified journey-level classification in the Technician series. Positions at this level are distinguished from the I level by the performance of the full range of duties as assigned, working independently, and exercising judgment and initiative. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit.

This class is distinguished from Heavy Equipment Maintenance Supervisor in that the latter assigns, directs and reviews the work of mechanics and others and performs the most difficult troubleshooting and repair work.

Positions in the Heavy Equipment Technician I/II class series are flexibly staffed and positions at the II level are typically filled by advancement from the I level after gaining the knowledge, skill, and experience which meet the qualifications for, and after demonstrating the ability to perform the work of, the higher-level classification.

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)

Management reserves the right to add, modify, change, or rescind the work assignment of different positions.

Some duties, knowledge, skills, and abilities may be performed in a learning capacity for entry-level (I-level) positions.

- Performs skilled maintenance and repair of heavy and light equipment such as trucks, tractors, graders and dozers; diagnoses, repairs and overhauls gas and diesel engines.
- Re-lines, rebrushes and rebuilds cams, brake pots, valves and related parts of braking systems.
- Ensure compliance with regulated inspections such as Cal OSHA Boom Inspections and CHP BIT Inspections.
- Performs emissions tests on heavy equipment.
- Performs major and minor repairs of suspension, walking beams and torque arms.
- Repairs and replaces driveline components; overhauls rear ends, reduction power dividers, clutch assemblies, universal joints, drive shafts and related components.
- Repairs and maintains manual, automatic, and power shift transmissions, torque converters and related components.
- Diagnoses, repairs, and maintains brakes, hydraulic systems and associated power take-off equipment.
- Rebuilds, repairs, and adjusts hydraulic pumps, cylinders, control valves, motors and related components.
- Diagnoses and repairs emissions systems.
- Diagnoses and repairs power and manual steering systems, electrical systems, starters, generators and related systems, components, and parts.
- Diagnoses and repairs, cleans, adjusts, and installs fuel, ignition, and cooling systems.
- Conducts safety checks and operational tests on light, heavy and related equipment.
- Road tests equipment; drives trucks or equipment as required; inspects vehicles in the shop and field.
- Reads and interprets manuals, drawings and specifications; estimates labor, material and equipment and orders parts required to complete assignments.
- Makes oral and written reports of work performed; completes forms and keeps accurate maintenance records.
- Welds and fabricates new and modified parts for truck bodies and similar equipment; installs and repairs power take-off equipment such as small electric cranes, hoists and small hydraulic lift equipment.
- Uses and maintains a full set of hand, power and shop tools and equipment related to the work.
- Observes safe work methods and utilizes safety equipment related to the work; safely handles and disposes of hazardous waste materials.
- Performs skilled maintenance and repair of heavy-duty diesel trucks and road construction heavy equipment such as motor-graders, loaders, backhoes, tractors and various asphalt paving equipment, and snow removal equipment.
- Diagnoses, maintains and repairs hydraulic and air-brakes systems, replaces air brake components i.e. brake pots/air chambers, linings, pads, air lines and valves and related components.

- Diagnoses, repairs, rebuilds and maintains various hydraulic operating systems, pumps, valves, hose fabrication and cylinders and related components.

QUALIFICATIONS

Knowledge of:

- Operation and maintenance of a variety of hand, power, and shop tools and equipment common to the field, including electric arc and gas welding equipment.
- Techniques, methods, materials, tools and equipment used in the overhaul, repair and maintenance of general vehicles and equipment in course of duty assignments.
- Safe work methods and safety regulations pertaining to the work.
- Troubleshoot and determine appropriate action in the maintenance and repair of equipment.
- Basic mathematical principles.
- Applicable federal, state, and local laws, codes, and ordinances relevant to the area(s) of responsibility.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and County staff.
- The structure and content of the English language to effectively perform the work.
- Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

Ability to:

- Diagnose and repair a wide variety of light and heavy equipment, vehicles, and equipment.
- Operate and maintain a variety of hand, power, and shop tools and equipment used in the work.
- Estimate necessary materials and equipment to complete assignments.
- Read and interpret manuals, specifications, and drawings.
- Read and interpret hydraulic and electrical schematics and fabrication blueprints.
- Maintain accurate logs, records, and basic written records of work performed.
- Make accurate arithmetic calculations.
- Inspect the work of others and maintain established quality control standards.
- Understand and follow oral and written instructions.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:

Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

Equivalent to completion of the twelfth (12th) grade

and

Heavy Equipment Technician I: Two (2) years of experience in the maintenance and repair of vehicles and/or heavy construction equipment.

Heavy Equipment Technician II: Two (2) years of experience in the maintenance and repair of vehicles and/or heavy construction equipment at a level equivalent to the County's class of Mechanic I.

Licenses and Certifications:

- Must possess a valid US driver's license upon date of application. Must obtain California driver's license following hire date per California DMV regulations.
- Must possess a Class A driver's license with tanker endorsement within six (6) months of hire at the I level. Must possess a Class A driver's license prior to hire at the II level.

PHYSICAL DEMANDS

- Mobility to work in a standard shop setting.
- Use standard office equipment, including a computer, and to operate a motor vehicle to visit various County sites.
- Strength, stamina, and mobility to perform light to medium physical work, to work around machines, to climb and descend ladders, and to operate varied hand and power tools, equipment, and machinery.
- Vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone.
- Standing and walking in operational areas to identify problems or hazards is frequently required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate above-mentioned tools and equipment.
- Positions in this classification frequently bend, stoop, kneel, reach, and climb to perform work and inspect work sites.
- Employees must possess the ability to lift, carry, push, and pull materials and objects up to 100 pounds, in all cases with the use of proper equipment and/or assistance from other staff.

ENVIRONMENTAL CONDITIONS

- Employees work in a maintenance shop environment and are exposed to loud noise levels, vibration, chemicals, dust, paint fumes, mechanical and electrical hazards, grease, oils, solvents, machinery with extremely hot surfaces and moving parts, moving objects or other vehicles, as well as cold and hot temperatures, inclement weather conditions, and road hazards.
- Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

ADDITIONAL REQUIREMENTS

- Pre-employment screening measures are required before an offer of employment can be made for this position (i.e. background screening, physical examination, drug testing, etc.).
- This is a DOT (Department of Transportation) covered classification and is subject to random drug and/or alcohol screening.