



## **Heavy Mobile Equipment Mechanic (Series 5803)**

### **Duties**

- Repairing a variety of heavy mobile equipment and vehicles, such as bulldozers, road graders, rollers, and similar heavy construction and earth moving vehicles; front-end loaders, backhoes, and similar power shovels; mobile cranes; heavy combat equipment; and heavy special purpose vehicles, and similar equipment, utilizing gasoline or diesel power and which have mechanical, hydraulic, pneumatic, and electric systems, controls, or features not commonly found on automobiles and ordinary transport trucks and buses.
- Determining the cause of malfunctions and makes repairs to a variety of heavy mobile equipment and vehicles. Completes major repairs, overhauls, and modifications independently. Conducts functional and performance tests on completed work.
- Tracing and locating defects which cause hydraulic and other major systems to fail or not perform up to specifications regarding power output, lifting capacity, speed, and pressure.
- Analyzing malfunctions and determines the extent of repairs necessary by visual and auditory examinations and by the use of a wide variety of test equipment, such as engine analyzers, dynamometers, exhaust analyzers, vacuum and fuel pump testers, injector testers, ignition timers, tachometers, voltmeters and gauges, micrometers, calipers, and dial indicators.
- Selecting and complying with technical manuals, illustrations, specifications, diagrams, schematics, and similar guides to make repairs and modifications according to specifications and procedures.

### **Qualifications**

- Knowledge and skill to determine the cause of malfunctions and make repairs to a variety of heavy mobile equipment and vehicles;
- Knowledge of how various mechanical, hydraulic, pneumatic, electrical, electronic, and fuel systems work together.
- Skill in using a wide variety of test procedures and equipment in tracing hard-to-locate problems; Skill to complete major repairs, overhauls, and modifications with little or no technical advice.
- Skill to conduct functional and performance tests on completed work assignments.
- Thorough knowledge of the mechanical makeup, operation, and working relationships of heavy duty systems, assemblies, and parts, including such major systems as diesel, multi-fuel, and gasoline engines;
- Knowledge of electrical, electronic, hydraulic, pneumatic, and other non-mechanical systems which have a functional relationship and effect on the operation of mechanical systems;
- Thorough knowledge of hydraulic lifting, loading, turning, and positioning systems and their mechanical, hydraulic, pneumatic, electrical, and electronic controls.
- Basic knowledge of electronics to identify and replace defective components, such as standard sensors, diodes, and circuit boards.

### **Conditions of Employment**

- Obtain and maintain an interim and/or final security clearance prior to entrance on duty. Failure to obtain and maintain the required level of clearance may result in the withdrawal of a job offer or removal.



- Possess a valid state driver's license.
- Work at a job site or location other than the permanently assigned location.
- This is a bargaining unit position.
- Work overtime and/or be on-call.
- Perform shift work.
- You will be required to wear personal protective equipment such as helmets, gloves, coveralls, glasses, goggles, respirators and safety shoes continuously for the duration of the work shift.
- Successfully complete a pre-appointment physical examination.
- Work other than normal duty hours, including evenings, weekends, and/or holidays.