

**Mechanic/Machinist  
Grade 13  
Class Code 996311**

**Working Procedure:** This position performs a variety of work associated with the repair and maintenance of gasoline and diesel machinery and equipment, fabrication of specialized parts, system design and manufacture, and troubleshooting. Cleans, inspects, and determines course of repair, including restoring close tolerances with accuracy, machining and/or replacing functional parts, devices and control instruments, reinstalls and assembles, starts, drives or operates equipment and devices to test performance. The incumbent must have the ability to follow maintenance procedures.

The incumbent must have the ability to follow manufacturers' instructions, blueprints and drawings, and written/oral instructions to fabricate correctly scaled and assembled components for projects, update equipment, fabricate changes needed for technology, safety, operational benefits or other departmental goals and objectives.

Must have the ability to observe mechanical services in operation and use sensory abilities, including operator interviews, to detect and isolate causes of trouble. Must be able to dismantle equipment to gain access and remove defective parts, inspect suspected parts, test, determine changes in dimensional or operational requirements, machine or replace functional parts and devices and control instruments. Continually reviews, analyzes, evaluates, and develops innovative and proactive ideas, addresses failed components and structural failures with physically stronger design and materials.

Must understand correct operation of electronic, engine, drivetrain, brakes, fuel, emissions and hydraulic systems and be able to follow troubleshooting tables and test points to isolate failures. Must understand the operation, diagnosis and repair procedures of all vehicle and equipment systems and be able to follow troubleshooting tables and test points to isolate repair failures. Must be able to diagnose and repair on-board computer problems, downloading stored fault codes, programming, testing feedback, and control circuits with laptop computers and diagnostic software and VOM meters. Ability to read wiring diagrams, test and repair wiring and its components as needed.

Must be abreast of technology changes and design/repair practices relative to State fleet vehicles and equipment.

Ability to comprehend, and use effectively, parts and service manuals or other technical sources, diagrams, schematics, technical drawings, Safety Data Sheets (SDS), and equipment repair information.

Must be able to communicate effectively with equipment operators, technicians or other specialists. Must have the ability to use independent judgement and make appropriate choices among various diverse and ambiguous options.

Must be able to use computer software applications and routinely input equipment maintenance and repair records into a computerized vehicle management system EVMMS (Equipment Vehicle Maintenance Management System).

**Tools and Equipment:** Must be able to operate all hand and power tools, measuring gauges and instruments, sophisticated electronic and other diagnostic equipment including computers with diagnostic software, all welding and cutting equipment, machining and metal fabrication equipment, shop vehicles, fork lifts, loaders, trucks, heavy and light duty equipment, safety equipment, lifts and cranes, service manuals, diagrams and schematics.

**Source of Supervision:** Shop Superintendent or designee

**Working Conditions and Physical Demands:** Must be able to perform physical activity in lifting (greater than 50 pounds), carrying and/or operation of tools, equipment and materials. Must be able to multi-task. The work is generally performed in an environment with exposure to hazardous materials and possible adverse weather conditions. When necessary, equipment will be repaired alongside roadway or in remote locations. Travel in all weather conditions and work independently may be necessary to repair and inspect equipment. Incumbent is subject to call-out at any time for emergencies or to meet repair demands.

**Education, Trade Knowledge and Experience:** Requirements to perform the duties of this position are journeyman level rating with four years of experience in diesel heavy equipment and truck or four years' experience in light duty vehicles or combination of each depending on position. Fabrication and welding experience is desirable. Related formal education in gas and diesel vehicle, equipment or machinery repair and maintenance may substitute for experience on a year for year basis. Requires considerable knowledge of math and the ability to effectively communicate verbally and in writing.

The incumbent must possess a thorough knowledge of equipment system design and repair; electronic theory and application, mechanical operation, and hydraulics design theory and application and welding construction. The position also requires skill and knowledge of welding equipment and materials, paints, lubricants, coolants, cleaning materials, metal stocks, fasteners, electronic components, hydraulic components, pneumatic components, and hazardous materials.

**Necessary Special Requirements:** A valid Montana Commercial Operators License (Class A, Type II) with no restrictions, a tank endorsement and a valid Medical Examiner's Certificate (MEC). Applicants with a learner's permit have 30 days to obtain the necessary Montana Commercial Operators License. Forklift certification must be obtained within 3 months after hire.

Successful applicant must be reasonably accessible to work location.

The above statement reflects the general details considered to describe the principle functions of the job identified and shall not be construed as a detailed description of all work requirements that may be inherent in the job.