

**Mechanic/Machinist
Grade B-12
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 in-service equipment; fabricate changes needed for technology, safety, operational benefits or other departmental goals and objectives. Observes mechanical services in operation and uses sensory abilities, including operator interviews, to detect and isolate causes of trouble; dismantle to gain access and remove defective parts; inspect suspected parts, test, determine changes in dimensional or operational requirements; machine/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 fabricating into longer lasting, failure-reduced components.

Must be abreast of technology changes and design/repair practices relative to State fleet vehicles and equipment. Must understand correct operation of electronic and hydraulic systems and be able to follow troubleshooting tables and test points to isolate 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, VOM meters, etc. Must have the ability to follow technical drawings, shop manuals or other technical sources and be able to communicate with other technicians or specialists; use of Departmental computer software applications and routinely input equipment maintenance and repair records into a computerized vehicle management system using EVMS (Equipment Vehicle Maintenance System) software.

Safety Responsibilities: Reports unsafe operations and safety concerns. Attends all safety and training classes directly related to work environment or equipment. Incumbent must be committed to heavy repair shop safety practices and good housekeeping. Responsible for safety of yourself and others in this position which is classified safety-sensitive.

Tools and Equipment: Must be able to operate all hand and power tools, measuring gauges and instruments, sophisticated electronic and other diagnostic equipment including laptop computers with diagnostic software; all welding and cutting equipment, machining and metal fabrications 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: Supervision is received from Working Shop Foreman, Shop Superintendent or designee.

Working Conditions and Physical Demands: Must be able to perform strenuous physical activity in lifting, carrying and/or operation of tools, equipment and materials. The work is generally performed in an environment with exposure to hazardous materials and possible adverse weather conditions. Travel in all weather conditions and work independently may be necessary to repair and inspect equipment. Incumbent is subject to call-out at anytime 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, or four years experience in gasoline, or four years experience in welding and fabrication or a combination of each depending on the position. Six months experience in fabricating is desirable. Requires considerable knowledge of math and the ability to effectively communicate verbally and in writing.

The position also requires extensive knowledge of structural steel types, welding materials, paints, lubricants, coolants, cleaning materials, metal stocks, fasteners, electronic components, hydraulic components, pneumatic components, and hazardous materials.

Knowledge, Skills and Abilities: Extensive skill in the operation of all types of equipment, including use of hand and power tools, computerized electric and electronic components, measuring gauges and instruments, sophisticated electronic and other diagnostics; all welding and cutting equipment, machining and metal fabrication equipment; shop vehicles, fork lifts, loaders, trucks, heavy and light duty equipment, safety equipment, lifts, cranes. Ability to comprehend, and use effectively parts and service manuals, diagrams, schematics, MSDS hazardous material data and equipment repair information, fill out requisition forms, shop job orders and PM program paperwork. Must be able to troubleshoot/diagnose equipment failures and make required repairs. Respond quickly and calmly to emergency situations, and through teamwork, deliver department goals and objectives on time, comprehend technical manuals and follow details. Establish and maintain working relationships and communication with administration, co-workers and technical experts. Make accurate and detailed field observations, use independent and seasoned judgment; make appropriate choices among various diverse and ambiguous options and alternatives. 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.

Necessary Special Requirements: A valid Montana Commercial Operators License (Class A, Type II) with endorsements for air brakes and tankers is required. 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.