State of Washington Class Specification

HEAVY EQUIPMENT MECHANIC 2

Class Code - new

**Definition**

Independently performs preventive maintenance, repair activities, diagnostic procedures, and fabrication activities on heavy equipment in the shop or field.

**Distinguishing Characteristics**

This is the journey level of the series. Under general supervision, independently performs a variety heavy equipment mechanic work such as: repairing, rebuilding chassis and component parts, designing and fabricating mechanical apparatus, repairing and servicing track drive components, and diagnosing, tuning and servicing engines and related systems on heavy equipment.

**Typical Work**

Repairs, rebuilds, replaces or restores chassis and component parts, brakes, clutches and transmissions, engines, pneumatic and hydraulic brake systems, electrical systems (high and low voltage), boilers, fuel injection systems, fuel pumps, high pressure pumps and carburetors, various powertrain and propulsion systems, medium/heavy suspension and steering systems, remote and direct controlled electronic, pneumatic, hydraulic control systems for stationary and mobile equipment, and other systems found in heavy equipment;

Designs and fabricates mechanical apparatus including truck mounted tanks, battery holders, toolboxes, utility bodies, snow plows and mounting brackets for lights and signs; design, layout and order appropriate materials; welds sections together and mounts apparatus, shields, deflectors, protective and safety access improvements on equipment;

Repairs and services track drive sprockets, rails, idler wheels, hard bars, track adjusters, hydraulic reversers, final drives, brake bands, steering clutches and hydrostatic transmissions;

Fabricates, modifies, and installs special equipment or replacement parts using mills, lathes, welders, torch sets, plasma cutter and metal cutting saws;

Services, diagnoses, repairs and maintains speed tandem drive axles with air or electric shift, hydrostatic driven, heavy duty multi-axle suspensions, both conventional steel or air springs;

Tunes gas and diesel engines, services valves, fuel filters and turbo chargers, and pressure checks fuel filters, adjust injector heights, fuel racks, governors, etc.;

Operates such shop equipment as grinders, vacuum gauge, voltage and regulator tester, drill press, wheel pullers, lathes, jacks, air tools, OBD diagnostic scanner, digital volt meters, computerized diagnostic devices and software, emission testers, and various hand tools and other equipment used in heavy and/or industrial/commercial equipment repair;

Diagnoses, services and repairs various systems that are found on heavy equipment such as mechanical and computer electronic controls, air brake systems, transmissions, computer controlled automatic and manual transmissions, high voltage generators (greater than 25kW), propane powered equipment, and pneumatic systems;

Road tests vehicles;

Performs other duties as assigned.

**Knowledge & Abilities**

Knowledge of: standard practices, materials, tools, and equipment used in the repair and maintenance of heavy equipment; safety issues in the use of tools, equipment, and supplies used in repair of motorized vehicles and heavy equipment; body and frame construction.

Ability to: diagnose mechanical, electrical and hydraulic malfunctions in heavy and/or industrial/commercial equipment; read manuals and schematics; rebuild engines and major driveline components in heavy equipment; weld, fabricate and braze; communicate with other mechanics about repair work needed; enter repair information in fleet maintenance management software; lead, mentor, assist, and teach employees.

**Legal Requirement(s)**

There may be instances where individual positions must have additional licenses or certification.  It is the employer’s responsibility to ensure the appropriate licenses/certifications are obtained for each position.

**Desirable Qualifications**

Journey-level standing as a heavy and/or industrial/commercial equipment mechanic as demonstrated by completion of a recognized apprenticeship; or by journey-level standing as recognized by a labor union;

OR

Successful completion of vocational technical training in heavy and/or industrial/commercial equipment repair to include welding AND two years of applicable work experience.

OR

Two years as a Heavy Equipment Mechanic 1.

A valid driver's license is required.

Some positions may require a Commercial Driver’s License.

**Class Specification History**

Establishment; adopted 6/30/2019, effective 7/1/2019