State of Washington Class Specification

HEAVY EQUIPMENT MECHANIC 1

Class Code - new

**Class Series Concept**

Heavy Equipment Mechanics and Supervisors in this series supervise and/or perform preventative maintenance and repair on wheeled and tracked equipment with a GVWR of 15,000 lbs. or greater, in a shop or in the field. Positions also perform preventative maintenance and repair on all types of heavy equipment used in highway maintenance and building emergency power generation equipment greater than 25kW (including diesel and gasoline powered engines, propane, electric, and auxiliary power units).

This series is differentiated from the Automotive Mechanic series in that the majority of time is spent servicing, repairing or supervising the repair and servicing of heavy and industrial/commercial equipment and vehicles over 15,000 GVWR rather than automobiles or light pickup trucks. Parts purchasing and inventory are defined in the Equipment Technician series.

**Definition**

Inspects, diagnoses and makes major and minor mechanical repairs, and performs preventative maintenance, on all types of equipment used in highway maintenance or heavy and/or industrial/commercial equipment (such as: wheeled and tracked equipment, power generators, pumps, agricultural equipment and specialized marine equipment).

Performs basic maintenance, repair and service activities on heavy equipment, and assists higher-level heavy equipment mechanics in the completion of preventive maintenance, repair and outfitting/modification of heavy equipment.

**Distinguishing Characteristics**

This is the entry level of the series. Work assignments at this level are planned and facilitate training.

Under the direction of a higher-level heavy equipment mechanic, follows established protocols and performs basic maintenance, repair and service activities of heavy construction equipment with a GVWR of 15,000 lbs. or greater.

**Typical Work**

Under the guidance of a higher-level heavy equipment mechanic:

* 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 power train and propulsion systems, medium/heavy suspension and steering systems, remote and direct controlled electronic, pneumatic, hydraulic control systems for stationary and mobile equipment;
* Designs and fabricates mechanical apparatus including truck mounted tanks, battery holders, toolboxes, utility bodies, snow plows and mounting brackets for lights and signs; designs, lays out and orders appropriate materials; welds sections together and mounts apparatus, shields, deflectors, protective and safety access improvements on equipment;

Performs routine preventive maintenance checks and adjustments on fluid levels, hoses, belts, brakes, tires, and clutches; changes filters and oil, and lubricates vehicles and motor driven equipment;

Overhauls engines, replaces engines and rebuilds components;

Keeps tools, equipment, and work area clean, organized, and in good working condition;

Troubleshoots malfunctions in the equipment and repair;

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 motor vehicles and engines; safety issues in the use of tools, equipment, and supplies used in repair of motorized vehicles and 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**

High school graduation or possession of a GED certificate.

AND

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

Some positions may require a Commercial Driver’s License.

**Class Specification History**

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