

STATE OF SOUTH DAKOTA CLASS SPECIFICATION

Class Title: Equipment Mechanic

Class Code: 080431

Pay Grade: GF

A. Purpose:

Installs and repairs mechanical systems, and performs preventive maintenance on wheeled vehicles and industrial and construction equipment to maintain efficient equipment operation and prevent failures and malfunctions.

B. Distinguishing Feature:

Equipment Mechanics install and repair mechanical systems and perform preventive maintenance on vehicles and equipment.

Equipment Technicians install, diagnose, and repair computer and mechanical systems on vehicles and equipment; and set up new equipment.

Equipment Service Workers perform preventive maintenance on vehicles and equipment.

C. Functions:

(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions which may be found in positions of this class.)

1. Installs and repairs mechanical systems to maintain operational capacity of vehicles and equipment.
 - a. Installs strobe lights.
 - i. Runs wires to lights.
 - ii. Puts ends on wires.
 - iii. Runs wires to battery.
 - b. Installs radios.
 - i. Does the wiring.
 - ii. Routes cables in secure areas.
 - iii. Determines location, drills holes in chassis, and mounts antennas.
 - c. Replaces parts on mechanical systems, e.g., shock absorbers; water pumps; power steering pumps; wires, plugs, gaskets; mufflers and tail pipes on trucks; U-joints, differential seals and fluids; axle seals and bearings; etc.
 - d. Replaces light bulbs and batteries.
 - e. Fabricates from patterns.
2. Performs scheduled major and minor preventive maintenance to troubleshoot mechanical systems and prevent problems.
 - a. Lubricates the chassis.
 - b. Adds or replaces fluids and filters.
 - c. Examines and replaces belts.
 - d. Replaces brake pads and shoes.
 - e. Checks electrical starting system, cleans battery terminals, replaces spark plugs.
 - f. Repairs and mounts tires.
 - g. Examines gauges for correct operation.
 - h. Checks engine for smooth operation and noise.
 - i. Checks transmission for smooth operation, changes transmission fluid and filter.
 - j. Checks steering, and tires for poor alignment.
 - k. Checks exhaust system, replaces mufflers and tailpipes in trucks.

- i. Does an overall general inspection of the vehicle or equipment.
3. Performs auto body repair to preserve the appearance of the vehicles and keep them functional.
 - a. Replaces door handles and latches.
 - b. Replaces windshields.
 - c. Replaces wiper blades and units.
 - d. Removes seats for reupholstering.
 - e. Applies decals.
 - f. Attaches license plates.
 - g. Repairs grills.
 - h. Does minor sanding and painting.
 - i. Strips vehicles down for sales.
4. Provides assistance to Equipment Technicians to facilitate larger and two-person projects.
 - a. Works throttles and cables.
 - b. Assists in removing and installing engines, transmissions, clutches, and other heavy work.
5. Performs administrative record keeping to comply with procedural guidelines.
 - a. Completes time sheets by allocating hours to correct work and equipment codes.
 - b. Opens, completes, and closes computerized work orders.
 - c. Assists Equipment Shop Foreman in compiling part numbers from new equipment.
6. Operates a tractor-trailer to transport equipment.
7. Performs other work as assigned.

D. Reporting Relationships:

Reports to an Equipment Shop Foreman. Does not supervise.

E. Challenges and Problems:

Challenged to repair and perform preventive maintenance on a large number and variety of equipment, much of which is outdated, in a limited amount of time.

Problems include making correct recommendations for repairs, repairing old equipment when parts are no longer available, and finding enough time to study manuals and technical bulletins.

F. Decision-making Authority:

Decisions include whether to replace parts, the extent of fabricated repairs, whether to replace items from the preventive maintenance checklists, and whether to recommend high-cost repairs to supervisor.

Decisions referred include final approval of high-cost repairs, work assignments and priorities, and where to buy parts.

G. Contact with Others:

Daily contact with highway maintenance crew members regarding repair of equipment, and with storeroom staff to obtain needed parts.

H. Working Conditions:

Equipment Mechanics are subject to heavy lifting, falling equipment, high-pressure hoses and connections, high-voltage electricity, power presses, welders, and cutting torches; they are exposed to fumes from exhaust systems, welding, solvents, paints, and other fluids; and they work with a wide variety of tools, many of which require extensive physical strength and manual dexterity.

I. Knowledge, Skills, and Abilities:

Knowledge of:

- the standard principles, methods, tools, and equipment of the automotive and diesel mechanics' trade;
- the principles of internal combustion engines, various drive trains, gear boxes, hydraulic systems, and electrical systems;
- basic automotive body repair methods and techniques;
- the occupational hazards and safety precautions of the mechanics' trade;
- electrical monitors and meters;
- welding;
- safe handling and disposal methods for hazardous materials.

Ability to:

- work independently and carry out oral and written instructions;
- read, comprehend, and apply repair manuals and diagrams;
- locate and adjust defects in motorized equipment;
- use tools and operate equipment employed in the adjustment, repair, and maintenance of motorized equipment;
- weld;
- establish effective working relationships with coworkers and customers.

J. Licenses and Certificates:

(Used for announcement purposes only.)

Incumbents must have a valid driver's license and must have or obtain a valid commercial driver's license (CDL) within sixty days of hire date to retain employment. The incumbent must have a Class A CDL with the tanker endorsement and no restrictions in order to operate any Class A vehicle that is a truck-tractor/semi-trailer, with manual transmission. The CDL must include an N endorsement (tank vehicle) for specific positions and must have no transmission restrictions.