

DESCRIPTION: Under limited supervision, leads the work of automotive/diesel mechanics at a central maintenance shop for an agency or district and independently performs highly skilled diagnosis, maintenance, and repair of multiple makes and models of heavy-duty trucks, road construction and maintenance equipment containing multiple, computerized systems/sensors, medium and light weight vehicles, and other motorized equipment; performs related work as assigned.

DISTINGUISHING CHARACTERISTICS: (A position assigned to this class based on the scope and level of work performed as outlined below.)

This is the fifth full performance classification level performing the highest and most complex work of the Automotive Mechanic class series. Positions at this level are distinguished from the lower classification levels by regular, on-going responsibility for complex and higher skilled mechanical work and work leader responsibilities over other skilled automotive/diesel mechanic workers. The work leader assists an employee who has been assigned regular, full supervisory authority, responsibility, and accountability. Typical elements of work direction over other positions by a work leader include scheduling and assigning work activities, monitoring workflow and progress, checking work products and services provided, and enforcing work standards.

Positions in this class also perform highly skilled and complex maintenance and repair work and operation of heavy-duty vehicles and equipment requiring more experience, training, and licensure. The heavy duty vehicles and maintenance equipment include trucks, rollers, front-end loaders, tractors, motor graders, snowplows, draglines, backhoes, distributors, lay-down machines, rock cutters, snoopers, pavement strippers, gas transports, semi-truck trailers, and chip spreaders. May perform, as required, other maintenance or manual tasks of a similar or lower level related to statewide agency operations.

EXAMPLES OF WORK: (A position may not be assigned all the duties listed, nor do the listed examples include all duties that may be assigned.)

Receives or initiates work assignments; schedules, assigns, coordinates, and guides the work assignments of automotive/diesel mechanics in accordance with established workflow/assignment requirements to assist supervisory staff in the timely accomplishment of assignee work.

Reviews and reports to the supervisor on the work performance of assigned automotive/diesel mechanics to determine the overall conformity to established timetables and quality standards, and to document and communicate employee production levels and training needs.

Diagnoses complex mechanical, electrical, computer, and hydraulic problems and failures to determine the nature, extent, necessity, and cost effectiveness of repairs. Researches and studies structural and procedural schematics and manuals. Interviews equipment operators and equipment vendors to gather information about equipment operation. Researches the history of the individual piece of equipment. Determines the extent of repairs and new parts needed; identifies peripheral damage; and determines alternative levels of repair.

Fabricates and repairs equipment and parts by using a variety of welders, welding materials, and methods to adapt incompatible parts, replace unavailable parts, secure attachments, and repair damage. Operates welders to make repairs and/or fabricate parts or install equipment.

M84625 – AUTOMOTIVE/DIESEL MECHANIC LEAD (continued)

Calibrates various systems on heavy-duty vehicles and equipment that distribute various materials as they pertain to road and weather conditions and allow operators to drive the vehicles and equipment safely and efficiently. Makes necessary adjustments and recommendations, as needed, and trains operators on these systems when necessary. Troubleshoots and repairs vehicles and equipment when needed.

Inspects new equipment to ensure that it meets specifications; sets up new equipment to make sure it is road ready. Evaluates equipment to identify adjustments that need to be made to accommodate auxiliary attachments, equipment, and operating systems. Identifies parts and materials needed to attach auxiliary equipment. Evaluates the equipment and compiles part numbers and other information for historical purposes.

Diagnoses multiple, complex, and varied vehicle and equipment computer systems to determine the cause of intermittent data flow that trips computer codes and makes necessary adjustments and repairs to preserve the integrity of computer systems. Researches equipment to identify functions that are computerized, and researches schematics of computerized systems. Interviews equipment operators to compile information about equipment operation and problems. Operates computerized diagnostic equipment to read data and troubleshoot equipment operational problems; replaces computer sensors; makes necessary repairs and adjustments; and operates equipment to determine accuracy of diagnosis and repairs.

Installs, troubleshoots, repairs, and replaces mechanical system components to restore equipment to a safe and operational state. Confers with equipment manufacturers and vendors to resolve problems. Maintains hydraulics systems; installs and monitors electrical systems; repairs steering systems; repairs suspension systems, brake systems, drive trains, fuel systems. Repairs/overhauls/replaces diesel and gasoline engines.

Orders, receives, stores, moves, and installs equipment, motors, supplies, and materials: pulls, pushes, lifts, and manipulates equipment, tools, and supplies, weighing up to 100 pounds in a safe manner to adjust, modify, install, repair, or overhaul light and heavy-duty vehicles and equipment.

Conducts initial evaluation of the job at hand; compiles notes and determines materials needed, takes measurements, draws designs of work to be done, and prepares estimates of costs.

Performs administrative record-keeping functions. Records part numbers from new equipment; updates equipment history including work done and parts changes. Enters information in computerized equipment information management system. Maintains inventory of equipment, parts, and supplies.

KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED: (These are needed to perform the work assigned.)

Knowledge of: agency policies and procedures relating to equipment maintenance and repair; agency record keeping systems; local, regional and national resources available to complete assigned duties; the advanced, modern principles, methods, tools, and equipment of automotive and diesel technology trade; the principles of internal combustion engines, different drive trains, gear boxes, hydraulic systems, global positioning systems (GPS), and electrical systems; automotive and heavy vehicle computer control, reporting, and diagnostic systems; the operating principles of automotive computer technology, diagnostics, and repair methods; variances of design among manufacturers; electrical monitors and meters; welding technology and practices; occupational hazards and safety precautions of the mechanics trade; safe handling and disposal methods of hazardous materials.

M84625 – AUTOMOTIVE/DIESEL MECHANIC LEAD (continued)

Skill in: operating electronic, computerized and/or precision measuring equipment to diagnose, maintain, and repair equipment; using hand tools and operating power and hydraulic tools and shop equipment such as welders, cutting torches, bench and angle grinders, drill presses, lathes, press breaks, and compressors.

Ability to: diagnose complex equipment and mechanical/electronic malfunctions and to determine the corrective repairs needed; operate diagnostic equipment and interpret results; read and interpret equipment schematics, blueprints, flowcharts, and technical manuals; operate equipment and determine if it is functional and safe; use machine shop tools; perform varied welding/fabrication functions; determine tensile strength of fabricated parts; visualize end-products from concepts; use manual and computerized recordkeeping systems; operate heavy, medium and light weight vehicles and equipment; communicate in person, over the telephone, and by mail or email with agency coworkers and vendors to exchange information; interact with coworkers, vendors, and agency administrative staff to maintain work relationships; instruct peers in the use of specialized tools, machines, and equipment; identify cost factors and estimate the cost of repairs/maintenance; learn basic approaches to establish work relationships with others and guide and direct coworkers as a team; learn approaches to plan maintenance/repair activities to accomplish established work goals; listen to others and foster commitment to work goals.

MINIMUM QUALIFICATIONS: (Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.)

Practical work experience performing automotive/diesel maintenance and repair, including use of computerized diagnostic instruments and equipment.

OR

Post high school vocational or technical coursework with an emphasis in automotive/diesel mechanics including instruction in computerized diagnostic equipment and experience working with automotive/diesel mechanical maintenance and repair practices, equipment, and technologies.

SPECIAL NOTES:

Positions in this class may require the employee to lift and handle, manually or through mechanical means, heavy materials and equipment weighing up to 100 pounds.

Positions in this class may require an employee to be exposed to dust, loud noise, hazardous materials, and adverse weather conditions (heat, cold, snow, rain, and wind).

Some positions in this class may require an employee to possess a valid driver's license or the ability to provide independent authorized transportation, in order to perform work-related travel. Some positions may require possession of a valid Class A Commercial Driver's License (CDL), with tanker endorsement within 60 days of hire.

State agencies are responsible to evaluate each of their positions to determine their individual overtime eligibility status as required by the Fair Labor Standards Act (FLSA).