



STATE OF NEVADA
Department of Administration
Division of Human Resource Management

CLASS SPECIFICATION

<u>TITLE</u>	<u>GRADE</u>	<u>EEO-4</u>	<u>CODE</u>
EQUIPMENT MECHANIC IV	33	G	9.322
EQUIPMENT MECHANIC III	32	G	9.323
EQUIPMENT MECHANIC II	31	G	9.331
EQUIPMENT MECHANIC I	29	G	9.333

SERIES CONCEPT

Equipment Mechanics maintain, repair, and modify fleet equipment comprised of a variety of light, medium, and heavy automotive and maintenance equipment as well as specialized mechanical equipment and machinery including landscape equipment, computerized testing equipment, and diesel-fueled electric power generators.

Determine the cause and extent of component or system failure through test drives, pressure and temperature checks, visual inspection, use of diagnostic equipment, and reference to technical service manuals, service information bulletins, blueprints and schematic manuals; diagnose malfunction and order parts required for repairs by researching parts manual to locate proper parts, contact vendors if necessary, and complete purchase requisitions.

Repair and/or rebuild brake systems including disc, drum and air brakes; replace brake shoes and pads; turn drums and rotors on a brake lathe; rebuild master cylinder and wheel cylinders and replace brake lines; repair or replace defective air brake components such as air valves, compressors, air tanks, air dryers, air lines and air chambers.

Repair and/or replace steering and suspension system components such as manual or power-assist steering boxes, power steering pumps and lines, tie rod ends, steering columns, bushings, king pins, springs, ball joints, torsion bars and shock absorbers.

Repair and/or replace differential and drive line components; remove and disassemble differentials; replace faulty parts, bearings and seals; reassemble and reinstall differentials; remove drive shafts; replace universal joints; check alignment and balance and reinstall drive shafts.

Repair and service automatic and manual transmissions; replace transmission fluid and filters; replace seals; and repair or replace clutch assemblies.

Maintain and repair electrical and wiring systems; repair or replace generators and alternators; test and replace batteries; locate and replace faulty fuses and wiring in electrical circuitry; replace ignition system components; service and repair starters; and replace or install wiring, connectors, switches, motors, and lamps.

Fabricate and install parts, components and special use items; measure and draw plans; calculate material requirements; cut and assemble the item by either welding or bolting together; and install the finished product.

Perform related duties as assigned.

CLASS CONCEPTS

Equipment Mechanic IV: Under general supervision, incumbents organize, oversee and direct an agency equipment shop; supervise equipment shop personnel; and may perform the full range of duties described in the

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CLASS CONCEPTS (cont'd)

Equipment Mechanic IV: (cont'd)

series concept including complex diagnosis and rebuilding work and performing specialized design and fabrication.

Schedule and oversee equipment repair and maintenance for the agency's fleet by inspecting equipment or consulting with agency personnel; determine type and complexity of work; write work orders; determine priority of repairs and either assign work to agency personnel or arrange for an outside vendor to complete; ensure repairs are completed correctly and in a safe and timely manner; charge labor, parts and material to the appropriate cost center.

Supervise a crew of subordinate mechanics, typically three or more, and in addition, supervise other equipment shop personnel such as Fleet Service Workers as assigned; hire staff and provide training and technical assistance; assign and review work; initiate disciplinary action and evaluate performance; ensure personnel comply with federal and State laws and regulations and State, agency and division policies and procedures.

Provide training and ensure compliance with procedures established for the use and disposal of hazardous materials.

Purchase or request authorization to purchase equipment, tools, supplies, and materials including agency fuel required for equipment shop operations, facilities, and vehicle maintenance and operation; monitor inventory, estimate future needs, and locate vendors; locate and examine used equipment suitable for agency needs and make recommendations for purchase to agency management as needed.

Maintain records and prepare reports regarding work orders, purchases, vehicle usage, and fuel usage to be used by agency management for future planning, budget development and budget monitoring.

Equipment Mechanic III: Under general supervision, incumbents perform the full range of duties described in the series concept at the advanced journey level, and in addition, either:

- 1) Function as a leadworker for lower level skilled Equipment Mechanics on a regular basis by providing training and technical assistance, assigning and reviewing work, and providing input to performance evaluations. Positions at this level are distinguished from the lower level of the series by the leadworker responsibilities for skilled Equipment Mechanic II's and journey level skilled trades workers; or
- 2) In a correctional environment, function as a leadworker for an inmate crew on a regular basis and document inmate performance through completion of periodic performance reports. Incumbents are also responsible for implementing security procedures which include securing the work area from unauthorized inmates and accountability for assigned inmates, staff, tools, and equipment. Supervision of a crew of inmates must be within the institution and must be a regular and recurring duty of a position to warrant allocation to this class.

Equipment Mechanic II: Under general supervision, incumbents perform the full range of duties described in the series concept to include journey level duties such as extensive electrical and fuel system diagnosis and repair work, rebuilding complete transmissions, converting surplus military vehicles to fire apparatus, and performing mechanical inspections of vehicles involved in accidents.

Incumbents may provide training, work direction and review to semi-skilled equipment shop staff such as Equipment Mechanic I's, Fleet Service Workers, students, and inmate workers. This is the journey level in the series.

Equipment Mechanic I: Under close supervision, incumbents receive training in the more complex or specialized duties in preparation for advancement to the next level in the series and perform standard equipment maintenance and repair duties such as air conditioning repairs, repair and rebuilding brakes, disassembling

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CLASS CONCEPTS (cont'd)

Equipment Mechanic I: (cont'd)

engines, replacing components and reassembling engines. This is the entry level in the series and progression to Equipment Mechanic II may occur upon meeting minimum qualifications and with approval of the appointing authority.

MINIMUM QUALIFICATIONS

SPECIAL REQUIREMENTS:

- * Some positions require incumbents to furnish their own mechanic's tools.
- * In order to meet the needs of each agency, some positions may require specialized background, consistent with the parameters of the class specification.
- * A valid driver's license is required at the time of appointment and as a condition for continuing employment.
- * Some positions require a valid Class A or B commercial driver's license at the time of appointment and as a condition of continuing employment.
- * Pursuant to NRS 284.4066, some positions in this series have been identified as affecting public safety. Persons offered employment in these positions must submit to a pre-employment screening for controlled substances. In addition, federal law requires random testing for controlled substances during employment.
- * Positions in the Division of Forestry must pass a physical agility test, medical examinations, and background investigations provided by the agency.

EQUIPMENT MECHANIC IV

EDUCATION AND EXPERIENCE: Completion of a recognized automotive/equipment repair apprenticeship program followed by two years of journey level experience; **OR** completion of Equipment-Mechanic-In-Training in Nevada State service followed by two years of journey level experience; **OR** one year of experience as a Equipment Mechanic III in Nevada State service; **OR** an equivalent combination of education and experience. (*See Special Requirements*)

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

Detailed knowledge: methods, materials, tools and equipment used in the assembly, overhaul, repair, and adjustment of automotive maintenance equipment; electrical and mechanical theories and design applicable to the repair and maintenance of equipment; equipment safety, safe work methods and the proper use, storage, and disposal of hazardous materials. **Ability to:** communicate effectively both orally and in writing to provide training, obtain and provide information and explain and interpret policies and procedures; establish and maintain records and files and prepare reports pertaining to shop operations, equipment, materials and supplies; design and fabricate specialized equipment components and systems; train personnel in new methods and procedures; *and all knowledge, skills and abilities required at the lower levels.*

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job):

Working knowledge of: the principles and practices of supervision. **Ability to:** supervise staff including hiring, training, assigning and reviewing work, establishing work schedules and priorities, administering discipline and evaluating performance; set priorities which reflect the relative importance of the needs of the agency and the capacity of the shop to meet those needs within established policies and guidelines; modify and/or adapt designs, procedures, or methods in order to design new systems, modify existing systems, or accomplish tasks more efficiently; diagnose and determine what repairs are necessary to repair a system to proper working condition, estimate the cost of the repairs, and determine the cost effectiveness and feasibility.

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MINIMUM QUALIFICATIONS (cont'd)

EQUIPMENT MECHANIC III

EDUCATION AND EXPERIENCE: Completion of a recognized automotive/equipment repair apprenticeship program followed by one year of journey level experience; **OR** one year of experience as Equipment Mechanic II in Nevada State Service; **OR** an equivalent combination of education and experience. *(See Special Requirements)*

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

Working knowledge of: equipment systems and operating characteristics of equipment; methods, materials, tools and equipment used in the assembly, overhaul, repair, and adjustment of automotive and maintenance equipment; equipment safety, safe work methods and the proper use, storage, and disposal of hazardous materials. **Ability to:** read and understand service manuals, operating systems manuals, hydraulic and electrical schematics, and policy and procedure manuals; set priorities which reflect the relative importance of job assignments; establish and maintain effective working relationships with vendors and other sources of technical information; *and all knowledge, skills and abilities required at the lower levels.*

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job):

General knowledge of: State administrative regulations, policies and procedures regarding personnel and purchasing. **Ability to:** determine what equipment changes and modifications are required and write specifications for equipment and parts which reflect those requirements; establish and maintain records and files and prepare reports pertaining to shop operations, equipment, materials and supplies; Assign and review the work of others.

EQUIPMENT MECHANIC II

EDUCATION AND EXPERIENCE: Completion of a recognized automotive/equipment repair apprenticeship program; **OR** completion of the Equipment Mechanic-In-Training program in Nevada State service; **OR** an equivalent combination of education and experience. *(See Special Requirements)*

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

Working knowledge of: equipment systems and operating characteristics of equipment; methods, materials, tools and equipment used in the assembly, overhaul, repair, and adjustment of automotive equipment. **Ability to:** read and understand repair orders, service manuals, operating systems manuals, and hydraulic and electrical schematics; diagnose and determine repairs necessary to restore a system to proper working condition; use various diagnostic and testing equipment and precision measuring devices; work independently and follow through on assignments with minimal direction. **Skill in:** repairing, rebuilding and modifying all components of vehicles/equipment including rebuilding transmissions and performing extensive electrical and fuel system diagnosis and repair; *and all knowledge, skills and abilities required at the lower level.*

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job):

Working knowledge of: agency and division rules, policies, and procedures; the equipment operating systems and operating characteristics of the specialized equipment maintained by the agency to which assigned. **Skill in:** improvising as necessary to perform repairs in the field.

EQUIPMENT MECHANIC I

EDUCATION AND EXPERIENCE: Three years of supervised experience in an automotive/equipment repair apprenticeship program; **OR** three years of training as an Equipment Mechanic-In-Training in Nevada State service; **OR** equivalent combination of education and experience. *(See Special Requirements)*

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

Working knowledge of: automatic and manual transmissions and power trains; automotive emission control;

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MINIMUM QUALIFICATIONS (cont'd)

EQUIPMENT MECHANIC I (cont'd)

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application): (cont'd)
 automotive ignition system diagnosis and repair. **General knowledge of:** basic principles of diesel mechanics.
Ability to: write to prepare work orders, requisition supplies, and document conditions of equipment; read and understand repair orders, service manuals, operating system manuals, and hydraulic and electrical schematics; use various diagnostic and testing equipment and precision measuring devices. **Skill in:** performing maintenance and repair work on air conditioning and hydraulic systems; performing repairs on automatic and manual transmissions and power trains, automotive emission controls, and ignition systems; the use of tools, gauges, and special test equipment used in automotive equipment diagnosis and repair the equipment systems and operating characteristics of automotive equipment methods, materials, tools and equipment used in the construction, assembly, overhaul, repair, and adjustment of automotive and/or construction and maintenance equipment; safe working procedures and the proper use, storage, and disposal of hazardous materials; applying basic arc and acetylene welding and cutting and basic machining; rebuilding and repair work on vehicle engines, brakes, suspensions and steering; fuel, lubrication and cooling systems; ignition and emission systems; transmission work and hydraulic repairs.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job):
(These are identical to the Entry Level Knowledge, Skills and Abilities required for Equipment Mechanic II.)

This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards for positions assigned to this class.

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ESTABLISHED:	7/1/91P 11/29/90PC	7/1/91P 11/29/90PC	7/1/91P 11/29/90PC	7/1/91P 11/29/90PC
REVISED:	7/1/91P 2/15/91-3	7/1/91P 2/15/91-3	7/1/91P 2/15/91-3	7/1/91P 2/15/91-3
REVISED:	10/8/99UC	10/8/99UC	10/8/99UC	10/8/99UC
REVISED:	6/25/04PC	6/25/04PC	6/25/04PC	6/25/04PC
REVISED:	2/10/06PC	2/10/06PC	2/10/06PC	2/10/06PC