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Class Specifications for the Classes:

AUTOMOTIVE TECHNICIANS I AND II

Distinguishing Characteristics:

Complexity: This class reflects responsibility for supervising and/or independently performing the full range of maintenance, troubleshooting, and repair work on computerized systems (e.g. engine/fuel management systems, anti-lock brakes, etc.) in motor vehicles. The work involves utilizing computerized equipment (e.g. scanning instrument, oscilloscope, digital voltmeter, etc.) to test electronic systems, diagnose problems, and complete microprocessor-related repairs. The work involves performing journey-level mechanical and electrical maintenance and repair work on motor vehicles.

Level Distinctions:

I Level: This class reflects primary responsibility for independently performing the full range of maintenance, troubleshooting, and repair work on computerized systems (e.g. engine/fuel management system, anti-lock brakes, etc.) in motor vehicles. The work involves utilizing computerized equipment (e.g. scanning instrument, oscilloscope, digital voltmeter, etc.) to test electronic systems, diagnose problems, and complete microprocessor-related repairs. The work involves performing journey-level mechanical and electrical maintenance and repair work on motor vehicles.

II Level: This class reflects a working supervisor who supervises and participates in performing the full range of maintenance, troubleshooting, and repair work on computerized systems (e.g. engine/fuel management systems, anti-lock brakes, etc.) in motor vehicles. A position in this class supervises one or more Automotive Technician I positions.

Full Performance Knowledge and Abilities: (Knowledge and abilities required for full performance in this class.)

Knowledge of: Various types and makes of motor vehicle equipment and accessories; the operation of various types of microprocessor-based systems and engine controls; practices, tools, materials, and computerized equipment used in the automotive trade (e.g. scanner, oscilloscope, digital voltmeter, etc.); occupational hazards and safety measures applicable to the trade; principles of automotive electricity and electronics (e.g. OHM's law, series circuits, parallel circuits, and the theory and

operation of semiconductors, capacitors, resistors, diodes and thermistors, etc.); automotive microprocessor systems (i.e. how the systems work, how the various values of sensors respond and/or what they control, and how they are interrelated); principles of internal combustion engines and automotive systems and parts and how they are interrelated; and procedures for analyzing and diagnosing defects.

In addition, for the class Automotive Technician II, applicants must possess knowledge of the principles and practices of supervision.

Ability to: Diagnose motor vehicle problems utilizing computerized diagnostic equipment and a knowledge of the limitations of the diagnostic equipment; estimate materials, parts and labor necessary to perform any major overhaul; operate various machines and equipment used in adjusting, maintaining and repairing motor vehicles; locate, adjust, replace and repair components for microprocessor-based systems (e.g. anti-lock brakes, engine/fuel management systems, etc.) and mechanical defects on motor vehicles; understand oral and written instructions; read and comprehend vehicle repair manuals and electrical and electronic circuits and schematics relating to engine management systems; complete simple work forms; and operate a motor vehicle.

In addition, for the class Automotive Technician II, applicants must possess the ability to plan, assign, review, and evaluate the work of others; keep records and prepare simple reports.

Examples of Duties: *(Positions may not be assigned all of the duties listed, nor do the examples necessarily include all of the duties that may be assigned. This does not preclude the assignment of duties, which are not listed.)*

1. Perform scheduled preventive maintenance inspections and safety checks on vehicles and make necessary repairs and/or adjustments as needed for safe and satisfactory operation. Inspections include electronic testing and troubleshooting of microprocessor systems on vehicles using the proper monitors or testers and completing necessary adjustments, replacements or repairs.

2. Using computerized equipment and a knowledge of its limitations and functions of microprocessor-based automotive systems, diagnose operating defects to locate defects in electronic systems and make necessary corrective repairs, adjustments or replacements due to broken, worn, damaged, loose or faulty mechanical, electrical and/or electronic components.

3. Perform major repairs such as overhauling engines, automatic transmissions, differentials, transaxles, brakes (including anti-lock systems), steering, charging, cooling, and suspension systems.

4. Replace belts, batteries, lights, tires, locks, mirrors and components in the exhaust, cooling, electrical, charging, starting, fuel, emission control, drive line, brakes, suspension systems, and computer-related or electronically controlled units.

5. Make adjustments to brakes, lights, belts, automatic transmission linkages, doors, latches and powered locks and windows.

6. Service, evacuate, charge or retrofit and test vehicle refrigerants in air conditioning systems. Diagnose defects and make necessary corrective repairs/adjustments of replacements due to broken, worn, damaged, loose or faulty mechanical or electrical components.

7. Perform minor welding and simple sheet metal work.

8. Test drive vehicles after preventive maintenance services and repairs to insure that the vehicles are in safe operating condition.

9. Respond to emergency calls and make necessary field repairs.

In addition to the duties described above, positions in the class Automotive Technician II assign, review, and evaluate the work of Automotive Technician I positions, provide technical assistance to subordinates (including providing on-the-job orientation to new employees and instructing subordinates on work methods and techniques), set work pace to ensure satisfactory work progress; assume immediate accountability and responsibility for the work of subordinates; keep records and prepare simple reports; and price and order parts and materials.

Due to the transfer of authority to the Department of Education to administer its own Civil Service System pursuant to Act 51 Session Laws of Hawaii 2004, this is an adoption of the class specifications for the Executive Branch Civil Service classes AUTOMOTIVE TECHNICIAN I AND II by the Department of Education Civil Service system.

DATE APPROVED: 12/15/05

/S/ Gerald Okamoto
Gerald Okamoto
Assistant Superintendent
Office of Human Resources

EFFECTIVE DATE: 7/1/05