AUTO ELECTRICIAN (CLASS CODE 3707)

TASK LIST - 2021

Repair and Maintenance Work

- 1. Reviews operator's written trouble reports, memoranda, and verbal reports of vehicle mechanical and electrical problems, and obtains clarification as necessary; examines vehicles, vehicle work history files, results of diagnostic and other equipment tests, and actual condition of vehicle and/or equipment in order to understand what passenger vehicles, motorcycles, trucks, trailers, buses, vans, emergency vehicles, or other specialized equipment needs repairs and to determine type and extent of repairs necessary.
- 2. Tests wiring, ignition circuits, horn circuits, electrical and/or electronic parts, batteries, and charging systems components; inspects gasoline fuel system, diesel fuel system, exhaust and emission control components, hybrid vehicle systems, and air conditioning components and controls; and tests for faulty emergency or specialized equipment, such as safety interlock circuits, red and amber lights, spotlights, sirens, and power converters, in order to determine what repairs, replacements, adjustments, or maintenance are necessary.
- 3. Tunes engine; replaces or repairs defective diesel and gasoline fuel system components and ignition system components; repairs or installs electrical circuits, charging and starting system components, exhaust and emission control devices and components, air conditioning systems, faulty emergency and specialized equipment and components, such as safety interlock circuits, sirens, spot-lights, red and amber lights, and power converters, and electrical and fuel components; replaces and maintains lubricants, fluid levels, coolants, and fuel products; adjusts headlights to State Motor Vehicle Code specifications using Department of Transportation lighting standards; cleans and washes parts and equipment using steam, chemical, and solvent cleaning apparatus; repairs and/or rebuilds generators, starters, alternators, magnetos, distributors, carburetors, rope reels, and other miscellaneous motors, two-speed axles, and solenoids in order to comply with periodic maintenance schedules or to correct malfunctions.
- 4. Tests equipment after inspection, repair, and/or servicing in order to ensure safe and correct operating conditions.
- 5. Operates service vehicles in order to make emergency repairs and/or replacements on vehicles and equipment in the field.
- 6. Maintains tools and equipment in a safe operating condition and observes good housekeeping practices in order to ensure conformance with safety regulations.
- 7. Performs repair and maintenance work utilizing established maintenance programs and available shop facilities in order to ensure maximum availability of vehicles and equipment.

Technical Work

- 8. Uses basic hand and power shop tools, such as metric and standard tools, bench grinder, drill press, welding and soldering equipment, in order to fabricate and install special equipment and parts on vehicles and equipment.
- 9. Locates and obtains parts and supplies from stores and/or vendors in order to acquire the materials needed for repair and maintenance work.