

CLASS TITLE: ELECTRICAL MECHANIC (AUTOMOTIVE)

CHARACTERISTICS OF THE CLASS

Under supervision, functions as an automotive service technician in the inspection, repair, and maintenance of electrical systems and electronic components in automobiles and light and heavy duty gasoline and diesel driven automotive equipment, and performs related duties as required

ESSENTIAL DUTIES

- Inspects vehicles and related equipment to ensure electrical systems and electronic components (e.g., wiring and lighting systems, ignition systems, power and computer controls, hybrid and electric vehicle systems) are secure and operating properly
- Reads repair work orders describing symptoms or problems and uses testing equipment to diagnose and determine source of malfunctions or problems
- Refers to technical service manuals and schematics to troubleshoot electrical problems
- Repairs or replaces electrical components including alternators, starters, batteries, regulators, harnesses, instrument panels, and door controls
- Replaces spark plugs and adjusts ignition to ensure efficient engine performance
- Uses hand and power tools to dismantle, repair, or replace worn parts and reassemble components
- Runs operational tests on components to ensure that repairs and adjustments made were proper
- Prepares work activity reports
- Uses hydraulic jacks or hoists to raise and examine underside of vehicles
- Installs emergency lights on vehicles
- Maintains clean and orderly work areas
- Performs work on mechanical components of automotive equipment (e.g., filters, exhaust systems, PTO systems, air or fluid lines) when ancillary to other work being performed
- **NOTE**: The list of essential duties is not intended to be inclusive; there may be other duties that are essential to particular positions within the class.

MINIMUM QUALIFICATIONS

Education, Training, and Experience

• Graduation from an accredited college with an Associate's degree in Automotive Technology, plus two years of work experience as an automotive technician in the repair and maintenance of gasoline and diesel driven automotive equipment; or an equivalent combination of education, training and experience

Licensure, Certification, or Other Qualifications

• A valid State of Illinois driver's license is required

WORKING CONDITIONS

• Exposure to loud noise, fumes or dust, oily or wet environment

• Exposure to hazardous conditions (e.g., heavy machinery)

EQUIPMENT

- Computers and peripheral equipment (e.g., personal computer, computer terminals, hand-held computer, modems)
- Standard tools used in servicing automotive equipment (e.g., combination wrench, ratchet wrench, air impact guns, overhead pneumatic dispenser)
- Testing and monitoring equipment (e.g., computerized diagnostic equipment)
- Personal protective equipment (e.g., hard hat, shoes, glasses, gloves, vest, pads)
- Hydraulic jacks and hoists

PHYSICAL REQUIREMENTS

- Substantial lifting (up to 50 pounds) is required
- Ability to stand and walk for extended or continuous periods of time
- Ability to quickly bend, stretch, twist, or reach out with one's body, arms, and/or legs
- Ability to operate applicable hand tools, power tools, and equipment

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS

<u>Knowledge</u>

Moderate knowledge of:

- *automotive mechanical and electrical/electronic systems
- *applicable hand and power tools and diagnostic testing equipment
- *equipment, materials, and test instruments specific to the automotive electrical/electronic mechanic trade
- *repair, maintenance, and preventative maintenance methods, practices, and procedures applicable to the automotive electrical/electronic mechanic trade
- *applicable safety principals, methods, practices, and procedures

Some knowledge of:

- manufacturers' manuals for servicing equipment
- safety codes regulating the operation of heavy equipment
- *use of safety equipment and protective gear

Knowledge of applicable City and department ordinances, policies, procedures, rules, regulations, and ordinances

<u>Skills</u>

- *ACTIVE LEARNING Understand the implications of new information for both current and future problem-solving and decision-making
- *ACTIVE LISTENING Give full attention to what other people are saying, taking time to understand the points being made, ask questions as appropriate, and not interrupt at inappropriate times
- *EQUIPMENT MAINTENANCE Perform routine maintenance on equipment and determine when and what kind of maintenance is needed

- EQUIPMENT SELECTION Determine the kind of tools and equipment needed to do a job
- INSTALLATION Install equipment, machines, wiring, or programs to meet specifications
- *REPAIRING Repair machines or systems using the needed tools
- *TROUBLESHOOTING Determine causes of operating errors and decide what to do about it

Abilities

- COMPREHEND ORAL INFORMATION Listen to and understand information and ideas presented through spoken words and sentences
- SPEAK Communicate information and ideas in speaking so others will understand
- COMPREHEND WRITTEN INFORMATION Read and understand information and ideas presented in writing
- RECOGNIZE PROBLEMS Tell when something is wrong or is likely to go wrong
- REASON TO SOLVE PROBLEMS Apply general rules to specific problems to produce answers that make sense

Other Work Requirements

- INITIATIVE Demonstrate willingness to take on job challenges
- STAMINA Demonstrate energy and stamina to accomplish work tasks
- DEPENDABILITY Demonstrate reliability, responsibility, and dependability and fulfill obligations
- ATTENTION TO DETAIL Pay careful attention to detail and thoroughness in completing work tasks

All employees of the City of Chicago must demonstrate commitment to and compliance with applicable state and federal laws, and City ordinances and rules; the City's Ethics standards; and other City policies and procedures.

The City of Chicago will consider equivalent foreign degrees, accreditations, and credentials in evaluating qualifications.

* May be required at entry.

City of Chicago Department of Human Resources

Date: August, 2010