



Career Service Authority
Electrical Maintenance Worker

Page 1 of 5

GENERAL STATEMENT OF CLASS DUTIES

Performs standard level semi-skilled trades work in maintaining, repairing, and constructing electrical systems and equipment.

DISTINGUISHING CHARACTERISTICS

This class performs standard level semi-skilled electrical work. This class is distinguished from an Electrician that performs full performance skilled level electrical work in the maintenance, alteration, repair and installation of electrical systems, equipment, and fixtures in accordance with standard practices of the electrical trade.

Guidelines, Difficulty and Decision Making Level:

Guidelines are generally numerous, well established, and directly applicable to the work assignment. Work assignment and desired results are explained by general oral or written instructions.

Duties assigned are generally repetitive and restricted in scope but may be of substantial intricacy. Employee primarily applies standardized practices.

Decisions or recommendations on non-standardized situations are limited to relating organizational policies to specific cases. Problems that are not covered by guidelines or are without precedent are taken up with the supervisor.

Level of Supervision Received and Quality Review:

Under normal supervision, within a standardized work situation, the employee performs duties common to the line of work without close supervision or detailed instruction. Work product is subject to continual review.

Interpersonal Communications and Purpose:

Contacts with the public or employees where explanatory or interpretive information is exchanged, gathered, or presented and some degree of discretion and judgment are required within the parameters of the job function.

Level of Supervision Exercised:

By position, performs lead work.

ESSENTIAL DUTIES

Inspects, troubleshoots, and repairs electrical systems by utilizing electrical testing devices and checking switches and wiring for grounds and shorts or loose connections.

Replaces or repairs existing wiring systems according to electrical code standards and safety regulations under the supervision of a licensed journeyman electrician.

Reviews electrical blueprints and schematics.

Repairs and replaces defective electrical parts such as wiring, fuses, outlets, switches, breakers, and sensors.

Measures, cuts, and installs conductors, wires, and conduits under the supervision of a licensed journeyman electrician.

Performs preventative maintenance on electrical systems such as servicing, lubricating, rebuilding, and fabricating new circuits, updates the equipment wiring, and replacing parts under the supervision of a licensed journeyman electrician.

Maintains tools and equipment and keeps electrical supplies and parts in order.

Performs other related duties as assigned or requested.

Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

MINIMUM QUALIFICATIONS

Competencies, Knowledge, & Skills:

Electrical – Knowledge of electrical equipment, components, instruments, and systems including installation, testing, uses, repair, and maintenance.

Integrity/Honesty – Contributes to maintaining the integrity of the organization, displays high standards of ethical conduct, understands the impact of violating these standards on an organization, self, and others, and is trustworthy.

Reading – Learns from written material by determining the main idea or essential message and recognizes correct English grammar, punctuation, and spelling.

Writing – Uses correct English grammar, punctuation, and spelling to communicate thoughts, ideas, information, and messages in writing.

Interpersonal Skills – Shows understanding, friendliness, courtesy, tact, empathy, cooperation, concern, and politeness to others and relates well to different people from varied backgrounds and different situations.

Teamwork – Encourages and facilitates cooperation, pride, trust, and group identity, fosters commitment and team spirit, and works with others to achieve goals.

Diversity – Is sensitive to cultural diversity, race, gender, and other individual differences in the workforce.

Customer Service – Works and communicates with clients and customers to satisfy their expectations and is committed to quality services.

Self Management – Sets well-defined and realistic personal goals, displays a high level of initiative, effort, and commitment towards completing assignments in a timely manner, works with minimal supervision, is motivated to achieve, and demonstrates responsible behavior.

Agility – Bend, stretches, twists, or reaches out with the body, arms, or legs.

Eye-Hand Coordination – Accurately coordinates one's eyes with one's fingers, wrist, or arms to perform job-related tasks (for example, to move, carry, or manipulate objects).

Stamina – Exerts maximum muscle force to lift, push, pull, or carry objects and performs moderately laboring work.

Diversity – Is sensitive to cultural diversity, race, gender, and other individual differences in the workforce.

Technical Competence – Uses knowledge that is acquired through formal training and extensive on-the-job experience to perform one's job, works with, understands, and evaluates technical information related to the job, and advises others on technical issues.

Physical Strength – Exerts maximum muscle force to lift, push, pull, or carry objects and performs moderately laboring work.

Attention of Detail – Is thorough when performing work and conscientious about attending to detail.

Memory – Recalls information that has been presented previously.

Problem Solving – Identifies problems, determines accuracy and relevance of information, uses sound judgment to generate and evaluate alternatives, and makes recommendations.

Visual Color Discrimination – Accurately matches or detects differences among colors including shades of color and brightness.

Depth Perception – Accurately judges which of several objects is closer or farther away from the observer or the distance between an object and the observer.

Ability to read and understand electrical blueprints and schematics.

Physical Demands (Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs):

Standing: remaining on one's feet in an upright position.

Walking: moving about on foot.

Lifting: raising or lowering an object from one level to another.

Carrying: transporting an object, usually by hand, arm, or shoulder.

Pushing: exerting force upon an object so that the object is away.

Pulling: exerting force on an object so that it is moving to the person.

Climbing: ascending or descending objects usually with hands/feet.

Balancing: maintaining body equilibrium to prevent falling over.
Stooping: bending the body by bending spine at the waist.
Kneeling: bending legs to come to rest on one or both knees.
Crouching: bending body downward and forward by bending legs.
Reaching: extending the hand(s) and arm(s) in any direction.
Handling: seizing, holding, grasping, or otherwise working with hands.
Fingering: picking, pinching, or otherwise working with fingers.
Feeling: perceiving attributes of objects by means of skin receptors.
Talking: expressing or exchanging ideas by means of spoken words.
Hearing: perceiving the nature of sounds by the ear.
Repetitive motions: making frequent movements with a part of the body.
Eye/hand/foot coordination: performing work through using two or more.
Lifting: raising or lowering an object 25 – 50 pounds.
Far acuity: ability to see clearly at 20 feet or more.
Near acuity: ability to see clearly at 20 inches or less.
Depth Perception: ability to judge distance and space relationships.
Field of Vision: ability to see peripherally.
Accommodation: ability to adjust vision to bring objects into focus.
Color Vision: ability to distinguish and identify different colors.

Education Requirement:

Graduation from high school or possession of a GED Certificate.

Experience Requirement:

Two years of experience in wiring, installing, maintaining and repairing electrical systems.

Education/Experience Equivalency:

Additional appropriate education may be substituted for one year of the minimum experience requirement.

Licensure and/or Certification:

Possession of a valid driver's license at the time of application.
By position, requires possession of a Colorado Driver's License (CDL "B") with appropriate endorsements by the end of probation.

CLASS DETAIL

FLSA CODE: Non-Exempt

ESTABLISHED DATE: 09/16/1995

REVISED DATE: 07/12/2009

REVISED BY: Patricia Anderson

CLASS HISTORY 7/2209 - This class was revised and updated and put in the new class specification format.