

ELECTRICIAN

JOB SUMMARY

Under the direction of the Maintenance Supervisor, the Electrician installs, tests, repairs, replaces, and maintains electrical systems and equipment.

REPRESENTATIVE DUTIES

The position description describes the general nature of work performed.

ESSENTIAL FUNCTIONS

- Install, test, repair, replace and maintain a variety of electrical equipment including transformers, circuit break systems and electrical panel boards; design, install, repair, and maintain electrical receptacles, switches, controls and lighting systems; wire electronic valves and control panels; and install power sources for new or renovated electronic systems. Troubleshoot and repair short circuits, power failures, and other electrical problems; isolate electrical failures and formulate remedies for defective components; and trace out wiring and replace defective wiring and parts.
- Perform underground cabling and conduit locating activities and maintain and repair overhead lighting and power devices and systems by using lifts, boom trucks and/or bucket trucks.
- Repair and maintain electrical appliances and power tools; install and replace lamps, light fixtures, ballasts, switches, fuses, conduit, cabling and other electrical accessories; and repair and replace power cords, equipment and machines. Records and documents a variety of activities including preventive maintenance, purchases, and inspections.
- Instructs and orients school personnel on the operation of their electrical systems. Researches, engineers and designs electrical systems.
- Coordinates and monitors work of outside contractors to ensure projects are completed in a timely manner and according to specifications.
- Assists in the performance of other job-related duties as assigned.
- Attends educational seminars and meetings to keep current on job knowledge, skills and regulations and issues.

JOB REQUIREMENTS: MINIMUM QUALIFICATIONS

KNOWLEDGE OF:

- Materials, methods, tools and equipment used in electrical work.
- Basic electrical theory and calculation of formulas.
- Electrical codes and their proper implementation.
- Health and safety regulations.
- Safety practices for working with live circuitry.
- The installation, troubleshooting, diagnosing and repairing of electrical equipment and circuitry.
- How to read and understand blueprints and technical information.
- Reclaim and recycle practices.
- High and low voltage practice requirements.
- Job-related computer software applications.

ABILITY TO:

ELECTRICIAN

- Install, test, repair, replace, and maintain electrical equipment and circuitry.
- Apply basic electrical theory and calculate formulas.
- Adhere to electrical codes and their proper implementation.
- Adhere to required safety practices and recognize potential hazards.
- Make effective decisions in determining course of action.
- Work independently in the completion of tasks and projects.
- Read, research and understand technical information.
- High and low voltage practice requirements.
- Use job-related computer software applications.
- Understand and follow written and oral instructions.
- Communicate effectively both orally and in writing.
- Establish and maintain cooperative and effective working relationships with others.

EDUCATION AND EXPERIENCE

Any combination of education and experience equivalent to three years of journeyman level experience in the electrician field.

DISTINGUISHING CHARACTERISTICS

The Electrician is a journey-level trades class responsible for performing skilled electrical work in the installation, testing, repair, replacement and maintenance of electrical equipment and systems.

REQUIRED TESTING

Pre-employment testing and assessment is required to demonstrate the minimum qualifications for the position.

CERTIFICATES

Valid California Class C driver license.

CONTINUING EDUCATION/TRAINING

Participation in ongoing job-related training as assigned.

CLEARANCES

California Department of Justice (DOJ) and Federal Bureau of Investigation (FBI) background (fingerprint) clearance; pre-employment physical examination including tuberculosis (TB) and drug screen clearances.

WORKING ENVIRONMENT

The usual and customary methods of performing the job functions require the physical demands outlined below. All requirements are subject to possible modification to reasonably accommodate individuals with a disability.

Physical Demands Frequency Definitions Based on an 8-Hour Day:

Never = 0%

Seldom = 1-10% (<45 minutes)

CLASSIFIED

ELECTRICIAN

Occasionally = 11-33% (up to 3 hours)

Frequently = 34-66% (up to 6 hours)

Continuously = 67-100% (more than 6 hours)

Seldom	sitting, climbing/balancing (paperwork, repair/set up equipment)
Occasionally	walking, lifting up to 75 lbs. at waist height, carrying up to 75 lbs. up to 5 yards
Occasionally/Frequently	stooping/bending, squatting/crouching, kneeling, twisting back, pushing/pulling, fingering/fine manipulation, power/firm grasping, reach abovesoulder, hand controls
Frequently	lifting up to 50 lbs. at waist and shoulder height, carrying up to 25 lbs. up to 10 yards, carrying up to 50 lbs. up to 5 yards, handling/simple grasping, reach at shoulder and below shoulder, foot controls

AUDITORY OR VISUAL REQUIREMENTS

Auditory ability to respond to safety buzzers, communicate with coworkers and staff, operate vehicles safely, and react to emergency situations. Vision ability to see near, distant, color, depth and peripherally.

ENVIRONMENTAL CONDITIONS

Ability to operate a motor vehicle requiring a California Class C driver's license to conduct work, drive cars, trucks, forklifts or other moving equipment, work near hazardous equipment/machinery, walk on uneven ground, tolerate exposure to dust, gas, fumes, noise (required to wear ear protection), vibration, extremes in temperature and humidity, biohazard materials such as sewage; work at heights. Hazard includes danger of electrical shock.