

MAINTENANCE ELECTRICIAN

DEFINITION:

Under general supervision of the Maintenance and Operations Manager, performs skilled work in the installation, maintenance, repair and alteration of electrical equipment and systems; assumes and performs related work as necessary or required.

CLASS CHARACTERISTICS:

This is a skilled journey-level electrician class. The incumbent is expected to work independently in repairing and maintaining the electrical, signal, building safety & security, and lighting systems at school sites and other District facilities. Incumbents may be assigned to perform a wide range of maintenance work at an unskilled, semi-skilled or skilled level in other trades as needs arise.

EXAMPLES OF DUTIES:

Installs, inspects, tests, troubleshoots, repairs, maintains and services a variety of electrical equipment and systems including:

Signal systems, clocks and building safety & security systems; *E*

Power circuits, conduit and duct systems, switchboards, transformers, switches and relays, motor driven appliances and devices, generators, and control equipment; *E*

Interior and exterior lighting systems, e.g., fluorescent fixtures, lamps, ballasts, sensors, energy saving Quartz, Halogen, and Mercury Vapor lights; *E*

Installs interior and exterior wiring for equipment and appliances; *E*

Interprets electrical plans, specifications and codes, regulations and safety orders; *E*

Rewires, rebuilds, modifies existing equipment and systems; *E*

Coordinates repairs and installation of electrical equipment and systems with outside electrical contractors as needed. *E*

Utilizes a wide variety of tools, equipment and test devices common to the electrical trade; *E*

Plans, lays-out own work and that of assigned helpers, directs work of assigned helpers, may also act as a helper in other trades;

Prepares reports; inventories, requisitions materials and supplies;

Operates District vehicles.

E denotes an essential function of the job.

SUPERVISION:

Supervision is received from the Maintenance and Operations Manager.

Leads and/or directs the work of assigned helpers. Supervision is not exercised over other employees.

MINIMUM QUALIFICATIONS:

Knowledge of:

Methods, tools, materials, used in electrical installation and repair work;
Design, construction, installation, maintenance and repair of electrical apparatus;
Applicable codes, laws, regulations and safety orders;
Appropriate safety precautions and procedures;
Electrical theory and operation;
Shop mathematics.

Ability to:

Perform skilled work in the installation, repair, modification and maintenance of a wide variety of high and low voltage (480v to 24v) electrical and signal systems and equipment;
Diagnose and resolve electrical problems;
Use a variety of electrical diagnostic equipment and repair tools;
Work from diagrams, technical manuals, plans, blueprints, oral and written instruction;
Plan, layout work, estimate time, materials and cost needed to complete assigned tasks;
Instruct and lead work of assigned helpers;
Coordinate repairs and installation requirements of electrical equipment and systems with outside electrical contractors;
Learn and perform a wide variety of general maintenance and repair work;
Operate motor vehicle equipment;
Establish and maintain cooperative working relationships.

EDUCATION AND EXPERIENCE

Individuals possessing the foregoing knowledge, skills and abilities are considered to possess education necessary to succeed in this class. The basic educational skills are typically acquired in completion of high school. Job specific skills are typically acquired in post-secondary training in basic electricity/electronics or through one to two years of experience working with a skilled electrician. Two to three years of prior successful of journey-level electrician work experience are typically required to obtain the practical experience to succeed in this class, or membership in a construction union, possession of a journeyman card/license, or a State contractor=s license.

LICENSE REQUIRED

Possession of a valid and appropriate California Driver License.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT:

Stands, walks, climbs stairs and ladders, maintains balance, stoops, bends, kneels, and frequently reaches over head to perform work; Does heavy work, lifting, carrying, pushing objects weighing 100 pounds; repetitively uses fingers on both hands, twists and exerts pressure with wrists and hands; uses both hands/legs simultaneously; requires rapid mental/muscular coordination; communicates clearly and is able to understand normal voice conversation; requires hearing over a broad range of frequencies; has good depth perception and normal color vision; visual acuity sufficient to see small details, frequently in poor lighting conditions, and safely operate a District vehicle; works in various lighting conditions; works around a variety of powered and belt driven equipment; uses a telephone; works inside and outside with frequent temperature changes; occasionally exposed to dust, and toxic materials; has direct contact with District staff and vendors; works without direct guidance from supervisor; wears safety equipment appropriate to the job. Employment is contingent upon passing a physical examination and back evaluation test.

Last revised 12/12/02

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