

ELECTRONICS TECHNICIAN

PURPOSE:

To build, install, repair, and maintain electronic and electrical equipment.

FUNCTIONAL AREAS:

1. Build, install, repair, and maintain electronic and electrical equipment.
 - * A. Design and build equipment in accordance with the requirements of the customer and safe electronic procedure.
 - * B. Install electronic and electrical equipment such as communications and signaling equipment in and on buildings, vehicles, and other property and equipment.
 - * C. Measure operation of such equipment to ensure it remains within normal operating parameters; adjust and calibrate equipment to restore proper operation.
 - * D. Diagnose malfunctions of electronic and electrical equipment using various diagnostic tools and equipment such as oscilloscopes, multimeters, and other specialized equipment.
 - * E. Maintain the proper operation of electronic and electrical equipment.
 - * F. Repair electronic and electrical equipment, including microprocessor-controlled equipment and computers at the component level using small hand tools, soldering and desoldering equipment, and other tools of the trade.
 - * G. Program microprocessor-controlled equipment and computers to ensure proper operation.
2. Build and maintain positive working relationships with customers and peers.
 - * A. Communicate to arrive at a common understanding of the nature of equipment malfunction or improper operation.
 - * B. Instruct customers and peers on the proper operation and programming of equipment.
 - * C. Question customers and peers to evaluate equipment criteria and recommend specific equipment for purchase or construction.
3. Perform other related duties.
 - A. Maintain logs and records of equipment construction, purchase, installation, repair, and maintenance.
 - B. Maintain an inventory of repair parts and supplies sufficient to keep equipment as functional as reasonable within budgetary constraints.
 - C. Act as a consultant to other departments and divisions, within and without the City, on electronic and electrical equipment.

MINIMUM REQUIREMENTS:

1. Education and Experience:
 - * A. Graduation from an accredited program of training in electronic repair, or, certification by a nationally recognized electronics certification program, such as NABER, NICET, NARTE, APCO, an FCC Radiotelephone license, or equivalent technical certification.
 - * B. Three years' experience in component-level electronics diagnosis and repair.
2. Knowledge:
 - * A. Extensive knowledge of electronic theory and practice, including solid state and digital electronics.
 - * B. Extensive knowledge of electrical theory and practice.
 - C. Knowledge of FCC rules and regulations.

- * D. Knowledge of mathematics at an advanced algebraic and trigonometric level.
3. Skills:
- * A. Skill at diagnosing, maintaining, and repairing diverse electronic and electrical equipment at the component level.
 - * B. Skill at communicating with others to determine the nature of equipment malfunction and assist with problem diagnosis.
 - * C. Skill at manipulating tools and equipment using fine hand movements.
 - * D. Skill at analyzing equipment malfunctions using logic, experience, and advanced diagnostic equipment.
 - * E. Skill at programming microprocessor-controlled equipment and computers.
4. Abilities:
- * A. Ability to transport oneself to, from, and around various remote sites while carrying diagnostic and repair equipment, and repair and replacement supplies such as propane bottles, etc.
 - * B. Ability to climb tall structures to adjust and repair communications equipment.
 - * C. Ability to read, interpret, and understand electronic schematic diagrams and advanced technical manuals.
 - * D. Ability to diagnose, maintain and repair all types of electrical and electronic equipment at the component level, including surface mount components and large-scale integrated circuits.
 - * E. Ability to manipulate tools and equipment using fine hand movements.
 - * F. Ability to see to locate and identify extremely small components, component leads, color codes, etc., and to evaluate the video performance of TV's, monitors, VCR's, computers, etc.
 - * G. Ability to hear to evaluate the audio performance of electronic equipment.
 - * H. Ability to feel to perceive temperature fluctuations caused by equipment malfunction.
 - * I. Ability to smell to distinguish overheated or burned-out components, often by type of component.
 - * J. Ability to lift to move and carry equipment weighing up to 50 pounds.
 - * K. Ability to push or pull equipment weighing up to 100 pounds.

* Essential functions, or requirements necessary on the first day of employment.

HR: CT	Union: Basic	EEOC: Technicians	CSB: 19940308	Class No: 3228
WC: 9516	Pay: 30A-31E	EEOF: Admin/Finance	CC: 19940418	Resolution: 94-0342R