

ELECTRONICS TECHNICIAN 2**Nature of Work**

Under general supervision, performs full-performance level electronic and telecommunications work necessary for the installation, maintenance, and repair of electronic and electrical equipment for highway illumination, traffic control, traffic signal, traffic counting, materials testing, vehicle weighing, and/or law enforcement. Travel may be required. May be required to be on-call. Performs related work as required.

Distinguishing Characteristics

This classification is distinguished from the Electronics Technician 1 classification by the general supervision received and performing at the full-performance level.

Examples of Work

Inspects and repairs traffic signal and highway lighting systems.

Inspects two-way base, portable, and mobile radio stations/systems; communications towers; video recording systems; radar; sirens; lighting systems; or other electronic/electrical equipment using various diagnostic devices and meters to determine malfunctions.

Repairs and maintains two-way base, portable and mobile radio stations; communication towers; video recording systems; radar; sirens; lighting systems; or other electronic equipment in the field or shop.

Configures and programs two-way radio equipment for appropriate frequencies.

Installs and/or erects new or repaired electronic or telecommunication equipment; such as, traffic signal systems; two-way base, portable, and mobile radio stations/systems; communication towers; video recording systems; radar; sirens; or lighting systems according to manufacturer's specifications.

Isolates malfunctions of office equipment such as electronic calculators, computer lights, video and tape units, or sound systems using diagnostic devices, oscilloscopes, digital volt meters, and circuit boards.

Analyzes malfunctions of office equipment and makes repairs using equipment diagrams and manufacturer's specifications.

Determines priorities of repairs and emergencies when notified of the malfunctions.

Assists cities and municipalities with the installation and maintenance of traffic control signals and highway lighting systems.

Instructs equipment operator or proper operating procedures through explanation and demonstration of functions of various control switches and indicators.

ELECTRONICS TECHNICIAN 2 (CONT'D)**Examples of Work (cont'd)**

Tests and repairs malfunctioning mobile radios and transceivers.
 Performs calibration, maintenance and repair of ultrasonic testing devices.
 Assists in conducting propagation tests to determine the proper location of communication towers.
 Maintains and inventory of equipment, materials and supplies.
 Maintains records of tests conducted, repair work and materials and parts used.

Knowledge, Skills and Abilities

Knowledge of the principles of electronics and electricity.
 Knowledge of the safety practices for working with electricity and electronic circuits.
 Knowledge of the applicable manufacturer's manuals and specifications.
 Ability to read and interpret electrical drawings and circuit diagrams.
 Ability to use electronic and electrical test equipment.
 Ability to disassemble and assemble electronic equipment.
 Ability to analyst equipment malfunctions, determine the parts needed and the length of time for the repairs.
 Ability to keep routine records.
 Ability to safely work at high heights.
 Ability to maintain effective working relationships.

Minimum Qualifications

TRAINING: Graduation from a standard four-year high school or the equivalent.

EXPERIENCE: Two years of full-time or equivalent part-time paid employment in electronics repair or land mobile radio/microwave equipment repair.

SUBSTITUTION: Successful completion of an approved vocational school program in electronics of at least 1080 clock hours or an Associate Degree in Electronics or Electronics Engineering Technology from an accredited college or university may be substituted for one year of the required experience.

SPECIAL REQUIREMENT: Possession of a general FCC radio license may be required. Possession of a valid driver's license.

Established: 10/21/93
 Revised: 11/08/04, 11/19/07
 Effective: 11/19/07