

## CITY OF GLENDALE

<b>TITLE:</b>	<b>Traffic Operations Electronic Technician</b>	<b>CLASS CODE:</b>	<b>849</b>
<b>REPORTS TO:</b>	<b>Traffic Signal Supervisor</b>	<b>GRADE:</b>	<b>22</b>
<b>DEPARTMENT:</b>	<b>Traffic Engineering</b>	<b>FLSA:</b>	<b>N</b>
<b>JOB SPECIFICATION DATE: November 20, 2009 db</b>			

### **JOB SUMMARY**

Performs skilled electronics work in the testing, installation and repair of traffic signal controllers and in the design and production of electronic systems and test equipment.

### **ESSENTIAL FUNCTIONS**

1. Troubleshoots and repairs all malfunctioning microprocessor based traffic signal control equipment; functions as lead expert for Traffic Signal Technicians.
2. Tests and repairs electronic and electrical equipment including controllers, conflict monitors, detectors, load switches, flashers and other signal equipment.
3. Designs and builds new electronic systems for traffic control.
4. Programs and tests repaired equipment and verifies that equipment operates within specifications.
5. Operates field and shop equipment including oscilloscopes, volt-ohm-meters, frequency meters, microprocessor equipment, loop testers, and meggers.
6. Wires, modifies and installs traffic signal control cabinets, adds additional circuitry and updates existing equipment.
7. Sets and checks timing of traffic signal controllers at intersections; maintains a file of timings for all intersections.
8. Designs, constructs and uses various test equipment and display panels.
9. Maintains computerized equipment inventory for each signalized intersection.
10. Locates and blue stakes all underground electrical lines at signalized intersections.
11. Performs class A maintenance of all equipment at signalized intersections.
12. Evaluates and tests new equipment for possible use and maintains a file of equipment in use by location.
13. Maintains a parts inventory; orders parts as needed.
14. Conducts traffic signal training classes for field and shop personnel.
15. Receives and handles all trouble calls relating to traffic signal repair.
16. Performs aerial work such as hanging banners and repairing low-pressure streetlights.

### **SECONDARY FUNCTIONS**

17. Performs other related duties as required.

### **KNOWLEDGE, SKILLS AND ABILITIES**

#### **Knowledge of:**

The principles and practices and equipment involved in the installation and maintenance of traffic signals, controllers and detection equipment

Possible defects in signal and control equipment and of effective corrective measures

Electronic circuit design and construction, the maintenance and repair of solid state electronic equipment and the use of applicable tools, meters and test equipment

The occupational hazards and necessary precautions relative to electrical and electronic traffic signal repair work

**Skill in:**

The use of electronic testing equipment and other related tools and equipment  
Locating and repairing defects in electronic control systems

**Ability to:**

Design and build test units, electronic systems and other electronic components  
Establish and maintain effective working relationships with other employees and the public  
Work from drawings and specifications and to understand and follow oral and written instructions  
Provide lead expertise in areas of electronics design and repair

**WORKING CONDITIONS**

Primarily shop work working with electrical components. Often requires lifting heavy equipment, performing signal repairs at the height of traffic lights, sometimes in inclement weather. The risk of hazards can be substantially reduced by the use of safety precautions.

**MINIMUM QUALIFICATIONS**

Associate's Degree or trade school course certification in electronics and three years experience in electronics.

Any equivalent combination of training and experience that provides the required knowledge, skills and abilities, is qualifying.

**SPECIAL REQUIREMENTS**

A valid Arizona driver's license

Requires IMSA Level I Certification within one year from the date of hire, and Level II Certification within two years from the date of hire

Requires Work Zone Safety Certification within one year from the date of hire

May require night and weekend standby duty.

Applicants will be required to undergo drug testing prior to employment, and will be subject to further drug and alcohol testing throughout their period of employment, in accordance with the City of Glendale Substance Abuse policy.