

City of Fort Worth, Texas Job Description

Classification Title	Electronics Technician		
Job Code:	TC5100	Job Family:	Technical/Para-Professional
Pay Grade	508	Date Reviewed:	06/21/15
FLSA Status	Nonexempt	Date Revised:	10/31/16

GENERAL SUMMARY

Performs work associated with the installation, repair and maintenance of emergency lighting systems, radar, video, mobile data computer (MDC) systems and special equipment for police and related emergency vehicles and trucks. Designs, modifies and fabricates related electrical systems and repairs/replaces malfunctioning electrical components. Provides related technical assistance to assigned supervisory staff.

ESSENTIAL DUTIES & RESPONSIBILITIES

The intent of this job description is to provide a representative summary of the major duties and responsibilities performed by incumbents of this job. Incumbents may be requested to perform job-related tasks other than those specifically presented in this description.

1. Installs, programs, monitors, maintains, upgrades, and aligns communication and data equipment that may include handheld equipment or mobile radios and accessories, video recorders, mobile data computer (MDC), global positioning, and radar systems.
2. Diagnoses and resolves problems with communications equipment including radio communications systems and networks, microprocessor-controlled radio transceivers, and/or peripheral systems and equipment.
3. Designs interfaces for a variety of emergency lighting, communications, and mobile data computer systems; ensures correct voltage and amperage for specific equipment.
4. Installs, removes, diagnoses, repairs or replaces emergency lighting equipment, radios, mobile data computer (MDC), video systems, physical barriers, flare boxes, stop sticks, City of Fort Worth decals and markings for emergency vehicles and police motorcycles.
5. Troubleshoots, diagnoses and repairs emergency lighting equipment using multimeter, hand tools, wiring schematics and interfacing with the City's specific emergency lighting equipment. Researches new technical equipment and systems for installation repair and purchase.
6. Sets up K-9 Units with dog cages, hotdog unit, door popper and door popper remote.
7. Designs, fabricates, and installs special equipment and harnesses to adapt police specific equipment to vehicles.

8. Maintains accountability of shop stock, parts and equipment needed for repairs and/or installation on new and old police emergency vehicles.
9. Evaluates mechanical repair history of vehicles as needed to make recommendations about vehicle disposal and future financial investment and replacement to the section supervisor.
10. Communicates professionally with sworn personnel at all levels of the department regarding the condition, usage, repair, maintenance, replacement, and disposal of the fleet assigned to them.
11. Trains customers in the use of various systems and equipment such as video, radar, mobile data computers and emergency vehicle lighting/warning systems; works with contractors and vendors as appropriate to complete projects and assignments.
12. Performs related duties as required.
13. Adheres to assigned work schedule as outlined in the Department and City attendance policies and procedures; ensures all behaviors comply with the City's Personnel Rules and Regulations.

KNOWLEDGE, SKILLS & ABILITIES

- **Knowledge of:**
 - Electrical and component installation, modifications, removals and related minor repairs.
 - Mobile Data Systems, Windows Operating system, Network systems.
 - Automotive electrical systems and metal fabrication for radio and police package installation.
 - Use of multi-meter (DVOM) and other electronic troubleshooting equipment.
 - Manufacture and design of electrical systems.
 - Electrical theory.
 - Shop stock, parts and equipment.
 - Multimeter and basic automotive hand tools.
 - Electrical schematics and related equipment.
 - Volt and OHM meters.
 - Automotive electrical systems and related components.
- **Skill in:**
 - Electrical schematic usage.
 - Troubleshooting and resolving issues with communication, video and data equipment.
 - Prioritizing work activities and time management.
 - Making observations, sound decisions and using good judgment.
 - Hand tool use.
 - Making sound decisions.
 - Operating assigned equipment.
- **Ability to:**
 - Communicate clearly and effectively, both orally and in writing.

- Diagnose and repair complex mobile communications and data equipment installed in police vehicles.
- Perform duties in high stress emergency situations.
- Prepare clear and concise reports.
- Perform minor and major electrical and component installations, modifications, removals of electrical system repairs.
- Read and understand technical literature relative to vehicle up fit and mobile police communication, data and warning systems.
- Respond to requests and inquiries from the general public.
- Maintain accountability of shop stock, parts and equipment.
- Perform work using multimeter, basic automotive hand tools; use electrical schematics and related equipment.
- Troubleshoot automotive electrical systems and related components such as video, radar, MDC and emergency lighting systems.
- Work independently in the absence of supervision.
- Establish and maintain effective working relationships.

MINIMUM JOB REQUIREMENTS

High school diploma/GED and two years' experience of responsible basic automotive electrical repair or modification and installation of related electrical components and equipment.

OTHER REQUIREMENTS

Valid Texas Driver's License.

Criminal Justice Information System (CJIS) background clearance will be required at the time of hire.

WORKING CONDITIONS

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Depending on assignment, positions in this class typically require touching, talking, hearing, seeing, grasping, standing, stooping, kneeling, crouching, reaching, walking, repetitive motions, climbing, balancing, pushing, pulling and lifting; depending on assignment. Incumbents may be exposed to moving mechanical parts, odors, dusts, poor ventilation, chemicals, oils, extreme temperatures, inadequate lighting and intense noises.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Heavy Work – Depending on assignment, positions in this class typically exerting up to 100 pounds of force, occasionally up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly having to move objects.