



ANTELOPE VALLEY TRANSIT AUTHORITY CLASS SPECIFICATION

ELECTRONICS TECHNICIAN MINIMUM \$26.47/HOUR- MAXIMUM \$34.41/HOUR

Assigned to:	DEPARTMENT OF OPERATIONS AND PLANNING
Reports to:	FLEET MAINTENANCE MANAGER
Supervises:	N/A
Board Approval Date:	

General Description:

Under general direction provided by the Fleet Maintenance Manager, performs skilled maintenance to diagnose, maintain, repair, overhaul, inspect, and test to ensure high voltage charging systems are operational, functional and maintained; troubleshoots and repairs in-vehicle information technology systems; monitors equipment to maintain efficiency and safety; repairs, replaces and adjusts defective equipment, electronic and electrical components and systems controls; inspects microprocessor and solid state systems; maintain documentation of services provided; installs and maintains fare boxes, head signs, and message boards; installs, maintains and performs periodic maintenance; performs other duties as assigned.

Essential Duties and Responsibilities:

- Plans and performs security inspections for in-vehicle computers, networks, data hard drives, related computer media, and AVTA's proprietary data and information.
- Receives and responds to calls from users regarding issues, concerns and problems; diagnoses and repairs computer hardware and peripheral equipment problems; communicates and collaborates with vendor and contractors.
- Examines and evaluates new hardware; researches, specifies, recommends and arranges purchase of new and replacement in-vehicle technological equipment.
- Performs general maintenance tasks to repair, restore and retain equipment and tools in operable condition; inspects, tests equipment; replaces non-functioning parts; cleans tools and equipment; maintains work areas; monitors equipment operations to maintain efficiency and safety.
- Reports and documents inoperable and faulty machines and equipment; maintains records and reports of work activities performed, replacement and repairs of electric vehicle charging stations.

- Communicates needs, issues and concerns to Manager, contract service providers and maintenance team; identifies and coordinates technical assistance; provides continual monitoring and responds to maintenance and repair emergency situations as required.
- Develops procedures on specific maintenance services provided to contractors.
- Conducts fleet safety inspections; performs diagnostics and troubleshooting; repairs gasoline, diesel combustible engines, high voltage-electric powered and hybrid electric vehicles, including BYD, MCI, GMC, and Ford.
- Tests, inspects, diagnoses and repairs high voltage charging systems from manufactures including ABB, Heliox, WAVE/Ideonomics, WAVE high voltage electric vehicle charging and BYD.
- Installs and monitors required equipment such as Apollo, Avail, GFI; operates vehicles requiring Class B licenses with endorsements; maintains logs of charger statuses, parts ordered/replaced; performs routine inspections of all fleet vehicles to ensure contractor compliance of preventative maintenance inspections; performs safe practices and handling of high voltage components while using proper high voltage/arc-rated PPE.
- Assists operations with bus switch outs, and transportation of bus units from AVTA to other facilities; designs, plans, lays out, fabricates, prepares and welds to construct varies projects; installs, removes and repairs decal and vinyl wraps for fleet vehicles.
- Performs general maintenance and troubleshooting tasks; monitors and maintains in-vehicle information technology systems; replaces needed parts; inspects charging systems for electrical hazards such as any loose, damaged, or missing hardware, wiring, bolts and for equipment, test charging systems for correct voltage/resistance parameters of components within charging systems, test charging systems.
- Prepares and maintains logs of parts used, ordered, and received; tracks inventory of varies items such as fleet vehicle maintenance/repair, parts, charging system parts, warranty items, tools, equipment, PPE and safety items.
- Drives units onsite, offsite, and to various locations; operates machinery such as forklifts, vehicle lifts, boom lifts; utilizes programs such as HAMS, Wave, and Fleet net to track fleet vehicle data, status, and locations.
- Repairs and adds fixtures that require fabrication or welding of metals such as pressure washer trailers, hauling trailers, bus stop shelters components such as metal paneling, support stands for charging station platforms; installs equipment onto buses requiring fabrication of mounts or other fixtures.
- Inspects new microprocessor and solid state systems installed by contractors.
- Tests and evaluates new hardware; keeps user informed of progress.
- Researches, specifies, recommends, and arranges for the purchase of new and replacement in-vehicle technological equipment.
- Performs other duties as assigned.

Required Qualifications

Knowledge of:

- Fleet vehicle inspection procedures, routine maintenance, diagnosis protocols to identify problems, and methods to implement necessary repairs;
- Pneumatic power tools, wireless electric tools, corded power tools, measurement tools such as multi-meters, tape measures, measuring cups of liquid volume, hand tools’;
- Apollo security cameras, onboard Kenwood radios, Genfare fare boxes and other equipment used for daily operations;
- Repair and Maintenance procedures of buses, cars, trucks, and vans in AVTA’s fleet;

- Basic solid state circuitry diagnostic and repair techniques and procedures;
- Test equipment and tools needed in the repair, maintain, and install electronic and electrical systems and equipment;
- Theory and principles of electronic and electrical equipment and circuits;
- Analog and digital control systems;
- Principles of project development and management;
- Back up and system mirroring processes;
- Current technology in the areas of microcomputer hardware and software and current technology and implementation techniques of single-user and multi-user computer windows-based systems;
- Variety of simple to complex software, including transportation software and Microsoft Office applications;
- electronic components used on fleet vehicles;
- Theory of inductive energy transfer;
- Safety principles, practices, and procedures of fleet maintenance, including equipment and hazardous materials;
- Record keeping principles and procedures;
- Modern office practices, methods, and computer equipment and applications related to the work;
- English usage, grammar, spelling, vocabulary, and punctuation.

Ability to:

- Maintain, inspect, diagnose, and repair high voltage electric vehicles in AVTA's fleet;
- Utilize welding tools such as Metal-Inert Gas welders, Shielded Metal Arc welders, angled grinders, speed square tools, angle finders, miter saw, chop saws;
- Operate fleet buses requiring class B license with endorsements;
- Work on ABB, Heliox, BYD, WAVE high voltage charging systems;
- Utilize pneumatic power tools, wireless electric tools, corded power tools, measurement tools such as multi-meters, tape measures, measuring cups of liquid volume, hand tools;
- Repair buses, cars, trucks, and vans in AVTA's fleet;
- Establish and maintain professional business relationships with management, co-workers and outside vendor or contractor representatives;
- Communicate issues, concerns or needs in a respectful and efficient manner;
- Inspect fleet vehicles, perform routine maintenance, diagnose problem found, and carry out necessary repairs for solution;
- Organize and manage time adequately;
- Onboard informational technology equipment;
- Troubleshoot, repair, rebuild, and conduct preventative maintenance inspections on in-vehicle LED display screens, fare collection systems and other related information technology systems;
- Learn and stay current on all new technologies introduced into the transit industries as it relates to in-vehicle information technology systems;
- Manage multiple projects, including coordinating, leading meetings, and producing project status reports;
- Provide technical advice and consultation to ensure efficient computer utilization;
- Maintain confidential information, records, and files;
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines;
- Prepare written reports, document defects and repairs on inspection forms, work orders, or designated computer programs;

- Effectively read, understand, and use technical information found in repair manuals, service change bulletins, and applicable technical documents including parts and supply manuals;
- Maintain routine records as assigned.

Education and Experience

Any combination of education, training and experience that provides the required knowledge, skills, and abilities is qualifying. Typical qualifications include the following:

Education: HS/GED, supplemented by the completion of a mechanical apprenticeship with instruction in the maintenance of various types of facilities and light and heavy equipment and vehicles.

Experience: Five (5) years of hands-on experience performing electronic, computer, and mechanical maintenance and repair in support of transit buses, and support vehicle fleet.

Licenses, Certifications and other requirements:

- Possession of valid CA Driver's License Class B at time of appointment.

Desirable Qualifications:

- N/A

Physical Elements and 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.

- Office environment with moderate noise levels, controlled temperature conditions;
- Fieldwork in a centralized maintenance shop with exposure to loud noise levels, vibration, confining workspace, chemicals, dust, paint fumes, mechanical and/or electrical hazards, grease, oils, solvents, machinery with extremely hot surfaces and/or moving parts and moving objects or other vehicles;
- Possibility of interaction with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures;
- Mobility to work in a standard office setting and use standard office equipment, including a computer, and to work in a standard shop setting and use and operate a variety of tools, power tools, equipment and machinery;
- Mobility to operate a motor vehicle and drive on surface streets;
- Visual acuity to identify mechanical issues, to identify and locate parts and repair tools/equipment, to inspect, analyze and diagnose problems with automobiles, trucks, and a variety of gasoline and diesel powered maintenance and construction equipment;
- Strength, stamina and mobility to perform light to medium physical work; vision to read printed materials and a computer screen; color vision to read various dials, gauges and identify color-coded cables and wires;
- Hearing and speech to communicate in person and over the telephone;
- Walking and working on slippery or uneven surfaces;
- Bending, stooping, kneeling, reaching and climbing to perform work;
- Lifting, carrying, pushing, and pulling materials and objects weighing up to 50 pounds.