



Title: Vehicle and Equipment Maintenance Specialist

FLSA Status: Non-Exempt

BRIEF DESCRIPTION:

The purpose of this position is to initiate, develop, evaluate, and implement modifications and upgrades to LRV, fare vending equipment, or specialized tools, as well as the repair of such equipment. This is accomplished by preparing technical data, developing capital budget requests, upgrading equipment, modifying equipment, interfacing with manufacturers, developing and initiating equipment modifications, preparing technical documents, as well as contract and project administration.

ESSENTIAL FUNCTIONS:

Note: This information is intended to be descriptive of the key responsibilities of the position. The list of essential functions below does not identify all duties performed by any single incumbent in this position. Additionally, please be aware of the legend below when referring to the physical demands of each essential function.

(S) Sedentary Exerting up to 10 lbs. occasionally or negligible weights frequently; sitting most of the time.	(L) Light Exerting up to 20 lbs. occasionally; 10 lbs. frequently; or negligible amounts constantly; OR requires walking or standing to a significant degree.	(M) Medium Exerting 20-50 lbs. occasionally; 10-25 lbs. frequently; or up to 10 lbs. constantly.	(H) Heavy Exerting 50-100 lbs. occasionally; 10-25 lbs. frequently; or up to 10-20 lbs. constantly.	(V) Very Heavy Exerting over 100 lbs. occasionally; 50-100 lbs. frequently; or up to 20-50 lbs. constantly.
---	---	--	---	---

#	Code	Essential Functions	% of Time
1	M	Performs technical contract administration, project management, quality control oversight, and final acceptance by managing and coordinating the activities for maintenance, engineering and vendors, acting as a contact point for maintenance, managing projects, insuring the schedule and milestones are in accordance with the requirements of the contract, performing quality control on installation of equipment, reviewing field modification instructions, managing open items, and insuring the contractor provides resolutions in compliance with the contract language.	20%
2	M	Interfaces with, suppliers, vehicle manufacturers, other transit districts, and consulting agencies by finding solutions to legacy issues concerning aging equipment design, incorporating new parts, evaluating operations requirements for existing components, evaluating replacement parts, procuring test replacement parts, and insuring warranty requirements.	20%
3	M	Develops and evaluates equipment procedures for maintenance personnel by evaluating system integration processes, evaluating and creating repair procedures for systems and components, locating service providers to arrange for repair, troubleshooting system components, evaluating repair procedures, and providing technical assistance to shop personnel.	20%
4	M	Develops, evaluates, and initiates equipment modifications for LRVs and fare vending equipment by providing solutions to	20%



		obsolete parts, writing detailed installation procedures for equipment modification, updating technical documentation, presenting proposed modification for review and approval, entering new components in the procurement system, arranging for training of all shop personnel on modifications, and managing the technical bulletin process to insure all documents applicable to modifications are updated.	
5	M	Prepares, updates, and disseminates technical data, schematics, manuals, wire lists, and maintenance procedures by insuring technical documentation is accurate, up to date, and relevant, insuring the maintenance staff is in possession of the latest changes and revisions, updating electronic files on shared drives with new data, revising the revision level index, updating manuals, maintaining master files for technical documentation, fare vending equipment, and software volumes, and distributing updated technical documents.	20%

JOB REQUIREMENTS:

-Description of Minimum Job Requirements-	
Formal Education	<p>Work requires knowledge of a specific vocational, administrative, or technical nature which may be obtained with a two (2) year associate's degree, diploma or equivalent from an accredited college, technical, business, vocational, or correspondence school in Electronics or a closely related field.</p> <p>Additional directly related experience beyond the minimum requirement may substitute for the required education based on the ratio of one and a half (1.5) years of experience for each (1) year of education.</p>
Experience	A minimum of three (3) years of experience in the diagnosis, repair and maintenance of electronic/electrical equipment, technical specification writing, and contract administration.
Supervision	Work requires the occasional direction of helpers, assistants, seasonal employees, interns, or temporary employees.
Human Collaboration Skills	Work may require providing advice to others outside direct reporting relationships on specific problems or general policies. Contacts may require the consideration of different points of view to reach agreement. Elements of persuasion may be necessary to gain cooperation and acceptance of ideas.
Freedom to Act	The employee normally performs the job by following established standard operating procedures and/or policies. There is a choice of the appropriate procedure or policy to apply to duties. Performance reviewed periodically.
Technical Skills	Advanced: Work requires advanced skills and knowledge in approaches and systems, which affect the design and implementation of major



	programs and/or processes organization-wide. Independent judgment and decision-making abilities are necessary to apply technical skills effectively.
Budget Responsibility	Position has no fiscal responsibility.
Reading	Advanced - Ability to read literature, books, reviews, scientific or technical journals, abstracts, financial reports, and/or legal documents. Ordinarily, such education is obtained in at the college level or above. However, it may be obtained from experience and self-study.
Math	Intermediate - Ability to deal with a system of real numbers; and practical application of fractions, percentages, ratios/proportions and measurement. Ordinarily, such education is obtained in high school up to college. However, it may be obtained from experience and self-study.
Writing	Advanced - Ability to write editorials, journals, speeches, manuals, or critiques. Ordinarily, such education is obtained in at the college level or above. However, it may be obtained from experience and self-study.
Certification & Other Requirements	Possession of a valid California driver's license is required with the ability to obtain and maintain a valid Class B driver's license, with Passenger and Airbrake endorsements and Light Rail Vehicle (LRV) Operator's license.

KNOWLEDGE
<ul style="list-style-type: none"> • High tech test and measurement equipment, and computer diagnostic interface equipment for signal analysis. • Total quality management principles. • Research techniques, part cross reference, and operation requirements of electronic, and electrical and mechanical systems. • Contract policies and procedures. • Engineering, operation, and maintenance policies. • Procurement policies and procedures. • Configuration Management principles and processes for technical documentation, software, and hardware within the department. • Electronic, electrical, and mechanical systems theory and design for LRVs and fare vending equipment. • Cost estimating and technical writing for maintenance operations. • Electronic, electrical and mechanical test, safety and troubleshooting procedures. • Electronic, electrical, and mechanical systems designs for LRVs.

SKILLS
<ul style="list-style-type: none"> • Advanced word processing, spreadsheet, presentation and database software. • Specialized software related to functional area. • Contract administration.



ABILITIES

- Effectively communicate technical issues to a variety of groups.
- Research and diagnose electronic problems and compatibility issues.
- Incorporate digital pictures, AutoCAD drawings, and schematics in documents.
- Independently research and solve complex maintenance tasks.
- Provide test and measurement data.
- Provide test verification and troubleshooting results.
- Troubleshoot and repair to component level electronic and electrical circuits, LRVs, fare equipment, shop tools, and new system equipment.
- Update schematic diagrams.
- Verify proper system operation.
- Comply with the random drug testing provisions for safety-sensitive classifications.
- Write clear and concise technical specifications.
- Administer contract compliance and payments.
- Develop, submit, monitor capital projects.



OVERALL PHYSICAL STRENGTH DEMANDS:

-Physical strength for this position is indicated below with "X"-

Sedentary	Light	Medium X	Heavy	Very Heavy
Exerting up to 10 lbs. occasionally or negligible weights frequently; sitting most of the time.	Exerting up to 20 lbs. occasionally, 10 lbs. frequently, or negligible amounts constantly OR requires walking or standing to a significant degree.	Exerting 20-50 lbs. occasionally, 10-25 lbs. frequently, or up to 10 lbs. constantly.	Exerting 50-100 lbs. occasionally, 10-25 lbs. frequently, or up to 10-20 lbs. constantly.	Exerting over 100 lbs. occasionally, 50-100 lbs. frequently, or up to 20-50 lbs. constantly.

PHYSICAL DEMANDS:

C Continuously 2/3 or more of the time.	F Frequently From 1/3 to 2/3 of the time.	O Occasionally Up to 1/3 of the time.	R Rarely Less than 1 hour per week.	N Never Never occurs.
---	---	---	---	-----------------------------

Note: This is intended as a description of the way the job is currently performed. It does not address the potential for accommodation.

-Physical Demand-	-Frequency-	-Brief Description-
Standing	F	Making presentations; observing work site; observing work duties; communicating with co-workers
Sitting	F	Desk work; meetings; driving
Walking	F	To other departments/offices; around work site
Lifting	O	Supplies; equipment; files
Carrying	F	Supplies; equipment; files
Pushing/Pulling	O	File drawers; equipment; tables and chairs; hoses
Reaching	O	For supplies; for files
Handling	O	Paperwork
Fine Dexterity	F	Computer keyboard; telephone keypad; calculator; calibrating equipment
Kneeling	O	Filing in lower drawers; retrieving items from lower shelves/ground
Crouching	O	Filing in lower drawers; retrieving items from lower shelves/ground
Crawling	O	Under equipment
Bending	F	Filing in lower drawers; retrieving items from lower shelves/ground; making repairs
Twisting	O	From computer to telephone; getting inside vehicle
Climbing	F	Stairs; ladders; step stools; onto equipment
Balancing	F	On ladders; on equipment; on step stools
Vision	F	Reading; computer screen; driving; observing work site
Hearing	F	Communicating via telephone/radio; to co-workers/public; listening to equipment
Talking	F	Communicating via telephone/radio; to co-workers/public
Foot Controls	O	Driving; operating heavy equipment
Other (specified if applicable)		None

MACHINES, TOOLS, EQUIPMENT, SOFTWARE, AND HARDWARE:

Common hand tools, power tools, lifts, cranes, hoists, car lifts, common electronic test equipment, including multi-meters, oscilloscopes, scope meters, chart recorders, electronic and



mechanical measuring devices, computer and associated hardware and software.

ENVIRONMENTAL FACTORS:

C Continuously	F Frequently	O Occasionally	R Rarely	N Never
--------------------------	------------------------	--------------------------	--------------------	-------------------

D Daily	W Several Times Per Week	M Several Times Per Month	S Seasonally	N Never
-------------------	------------------------------------	-------------------------------------	------------------------	-------------------

-Health and Safety Factors-	
Mechanical Hazards	F
Chemical Hazards	O
Electrical Hazards	F
Fire Hazards	R
Explosives	N
Communicable Diseases	O
Physical Danger or Abuse	R
Other (see 1 below)	N

-Environmental Factors-	
Respiratory Hazards	W
Extreme Temperatures	S
Noise and Vibration	D
Wetness/Humidity	S
Physical Hazards	D

(1) N/A

PROTECTIVE EQUIPMENT REQUIRED:

Hearing protection, eye protection, respirator, rain gear, warm coat

NON-PHYSICAL DEMANDS:

F Frequently From 1/3 to 2/3 of the time	O Occasionally Up to 1/3 of the time	R Rarely Less than 1 hour per week	N Never Never occurs
---	---	---	-----------------------------------

-Description of Non-Physical Demands-	-Frequency-
Time Pressure	F
Emergency Situation	O
Frequent Change of Tasks	F
Irregular Work Schedule/Overtime	O
Performing Multiple Tasks Simultaneously	F
Working Closely with Others as Part of a Team	F
Tedious or Exacting Work	O
Noisy/Distracting Environment	F
Other (see 2 below)	N/A

PRIMARY WORK LOCATION:

Office Environment		Vehicle	
Warehouse		Outdoors	
Shop	X	Other (see 3 below)	
Recreation/Neighborhood Center			

(3)N/A

The above statements are intended to describe the general nature and level of work being performed by individuals assigned to this position. They are not intended to be an exhaustive list of all responsibilities, duties, and skills required. This description is subject to modification as the needs and requirements of the position change.