

JOB DESCRIPTION

Job Title: PTC Equipment Engineer I
FLSA Status: Exempt
Salary Grade: 8

PURPOSE OF POSITION

The PTC Equipment Engineer will maintain and support troubleshooting, diagnostics and inspections of PTC On Board equipment.

DISTINGUISHING CHARACTERISTICS

This is the entry level of the PTC Equipment Engineer series. At this level, assignments are generally limited in scope and are performed within a procedural framework established by higher-level employees.

SUPERVISION EXERCISED AND RECEIVED

- Receives supervision from departmental management/supervisory level roles
- No formal supervisory responsibilities

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended to describe the general nature and level of work being performed and are not to be interpreted as an exhaustive list of responsibilities.

- Assist in troubleshooting and providing diagnostics of MDM (messaging) problems; software versions, manual upload of track files, etc.
- Perform upgrades and maintain PTC On-Board software and hardware in coordination with the Back Office and PTC equipment vendors.
- Assist contractors or vendors who specialize in the evaluation, repair, troubleshooting, investigation of PTC onboard equipment failures.
- Collaborate with Human Resources for assistance with teaching and training various PTC, TMC systems, and Computer Display Unit (CDU).
- Collaborate with other SCRRRA departments and contractors for assistance in trouble shooting and repairing locomotive and cab car systems electrical, mechanical, air brake, event recorder, communication and mechanical components impacting PTC functionality including tachometer, antennas, and telecommunications.
- Conduct remote diagnosis of fleet by reviewing through internet (i.e. go to website), remote review of fault logs, understand severity and required action.
- Respond to priority or emergency situations and provide on-call assistance and service when needed.
- Schedule PTC equipment moves and test trains in coordination with Operations department.
- Leading other Equipment Engineers in troubleshooting and providing diagnostics of MDM (messaging) problems, software versions, manual uploads of track files, etc.
- Work with contractors or specialized vendors in the evaluation, repair, troubleshooting, investigation and lessons learned of PTC onboard equipment failures.
- Leading education and training of maintainers on the process to diagnose events and the process for downloading event recorder and TMC logs.



- Work with and lead maintainers on the process to troubleshoot mechanical components impacting PTC functionality including tachometer, antennas, and telecommunications.
- Act as a primary respondent on daily PTC operation call.
- Participate in rotating weekend and night “on-call” duty, in coordination with other members of the department.
- The responsibilities outlined above are representative of the role but not exhaustive. Additional duties may be assigned as needed, and reasonable accommodations will be provided to qualified individuals with disabilities in accordance with applicable laws.

MINIMUM QUALIFICATIONS

Education and Experience

- Associate’s degree in electronics, mechanical systems, engineering, computer science, or management information systems.
- A minimum of two (2) years of work experience in electronic and/or communication systems; certifications in electronics or registered as a Professional Engineer and licensed in California may substitute for one (1) year of work experience.
- A combination of training, education and/or experience that provides the required knowledge, skills and abilities may be considered when determining minimum qualifications. Advanced relevant coursework may also substitute for a portion of the required experience.
- A valid Class “C” California driver’s license with a satisfactory driving record of no more than two moving violations and no DUIs within the last three years

Preferred Qualifications

- Registered and licensed Professional Engineer in California

Knowledge, Skills, and Abilities

Knowledge of:

- PTC System Fundamentals
- PTC System Maintenance
- Service relationships (contractual service responsibilities) and maintaining positive interaction with service providers
- Freight and passenger railroad operating and train control knowledge
- Basic Unix/Linux experience

Ability to:

- Ability to pass Roadway Worker Protection (RWP) and Maintenance of Way (MOW) General Code of Operating Rules (GCOR) and become territory qualified within six months Work across departments
- Ability to work independently and in a team-oriented, collaborative environment
- Develop required level of knowledge to interact with remote troubleshooters from the manufacturer
- Develop technical aptitude with a variety of industry specific knowledge including emerging troubleshooting and diagnostic software
- Prioritize and executing tasks in a high-pressure environment



PHYSICAL REQUIREMENTS

- Transition between a stationary position at a desk or work location and move about Metrolink facilities or other work site locations
- Operate tools to perform the duties of the position, such as computers, office equipment, and work-related machinery
- Transport equipment or boxes up to 25 lbs
- Exchange ideas by means of communication
- Visual acuity to detect, identify, and observe employees or train movement and any barriers to movement when working on or near railroad tracks
- Hear and perceive the nature of sounds when working on or near railroad tracks
- Balance, ascend/descend, climb, kneel, stoop, bend, crouch, or crawl within assigned working conditions and or locations

Working Conditions

Position requires work in a normal office environment with little exposure to excessive noise, dust, or temperature. Work may also be conducted in outdoor environments, at construction sites, Railroad Track and Right-of-Way environments, and warehouse environments, with possible exposure to individuals who are hostile or irate, moving mechanical parts, and loud noises (85+ decibels, such as heavy trucks, construction, etc.)

Southern California Regional Rail Authority is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the Authority will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.

Last Updated: January 2026

