



TRANSIT VEHICLE ELECTRONIC TECHNICIAN

FC: MA825
PG: MW-III

PC: 301
BU: 01
January 1999

DEFINITION

Under general supervision, performs skilled preventive maintenance, troubleshooting, primary and some secondary repair, and modification to a variety of electronic and electro-mechanical equipment and components found in revenue vehicles; performs related work as assigned.

CLASS CHARACTERISTICS

This is a journey level classification performing skilled preventive maintenance, repair and modification on all electronic and electro-mechanical systems and components found in transit revenue vehicles. Incumbents work independently according to accepted standards of the trade, supervisory direction and District procedures and practices, and established specifications. Incumbents may also provide on-site maintenance, trouble assessment, response and adjustment of revenue vehicles. This class is distinguished from other specialized technician classes in that the work relates specifically to the maintenance and repair of electro-mechanical and electronic systems and components found on transit revenue vehicles.

EXAMPLES OF DUTIES

1. Following a pre-established schedule, performs preventive maintenance, testing and adjustment of electronic and related electro-mechanical systems found on transit vehicles, including those associated with propulsion, train control, brake control, air conditioning, annunciation, communications, door control, lighting, and auxiliary electrical supply.
2. Troubleshoots and performs primary maintenance on such systems, removing and replacing components as required to enable vehicles to be returned to revenue service.
3. Responds to and assesses transit vehicle operating problems in the field.
4. Makes field repairs to vehicles, provides technical information to central operations and maintenance control staff regarding equipment status and safety.
5. Performs major repair of vehicles involved in accidents.
6. Performs modifications to revenue vehicle electronic and electro-mechanical systems, as directed by engineering and supervisory staff.
7. Suggests improvements and works with engineering and other maintenance staff regarding modifications.
8. Uses diagnostic test equipment and precision measuring devices in the course of the work; may

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fabricate new testing equipment as required for use on new components and systems.

9. Performs secondary dismantling and repair of electronic and electro-mechanical systems.
10. Verifies performance of new or modified systems or equipment.
11. Works closely with transit vehicle mechanics in troubleshooting problems and performing primary repairs.
12. Reads and interprets diagrams, engineering drawings, manuals, schematics and work orders.
13. Measures, tests and inspects completed work to confirm adherence to specifications.
14. Documents work performed and parts and materials used; follows specified safety procedures.

QUALIFICATIONS

Knowledge of:

Basic operating principles of analog and digital electronics, electrical and electronic circuitry, and associated mechanical mechanisms, methods, equipment and materials used in the primary maintenance and repair of a variety of electronic and electro-mechanical systems, components and equipment.

Use and care of testing and power and hand tools of the trade.

Troubleshooting and diagnostic techniques.

Shop arithmetic as required for the trade.

Safety practices pertaining to the work.

Skill in:

Diagnosing and repairing operational problems in a variety of electronic and electro-mechanical systems, components and equipment.

Performing preventive maintenance on and modifications to electronic systems and components.

Reading and interpreting engineering drawings, diagrams, manuals and work orders.

Using and maintaining hand and power tools and testing equipment of the trade.

Understanding and following oral and written directions.

Maintaining accurate records of work performed and materials used.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

MINIMUM QUALIFICATIONS

Associate in Science degree in electronics from an accredited community college or an Electronics Credential from an accredited electronics certificate program, or its equivalent (i.e., completion of a military electronics training program). Four (4) years of verifiable electronic maintenance (troubleshooting, repair, and maintenance of electronic and/or electro-mechanical equipment) can be substituted for the education.

Other Requirements:

Must possess adequate color vision and be physically capable of working in confining work spaces

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and lifting equipment weighing up to 70 pounds.

Must be willing to work weekends, holidays, off hours shifts and occasional emergency overtime.

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