

**APPROVED**

DEC 31 1987

MASSACHUSETTS DEPARTMENT OF PERSONNEL ADMINISTRATION

CLASSIFICATION SPECIFICATION

Department of Personnel  
Administration

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I. ELECTRONIC TECHNICIAN SERIES:

Electronics Technician I  
Electronics Technician II

II. SUMMARY OF SERIES:

Incumbents of positions in this series plan the installation of electronic and/or electrical systems; install electronic and/or electrical systems and/or equipment; test, repair and maintain electronic and/or electrical equipment; maintain inventory of electronic and/or electrical equipment; order parts and equipment from vendors; perform related work as required.

The basic purpose of this work is to install, test, repair and maintain various electronic communications equipment and or systems.

III. ORGINIZATIONAL LEVELS:

Electronic Technician I is the entry-level technical job in this series.

Electronics Technician II is the first-level supervisory job in this series.

IV. EXAMPLES OF DUTIES COMMON TO ALL LEVELS IN SERIES:

1. Plans the installation of and installs electronic and/or electrical equipment or systems to meet agency needs.
2. Constructs electronic equipment from written and verbal specifications by drawing diagrams for printed circuits and wiring various electronic equipment such as receiver boards, etc.
3. Tests various electronic and/or electrical equipment by conducting sensitivity, selectivity and accuracy measurements and replaces defective parts in the repairing and maintenance of various electronic and/or electrical equipment.
4. Orders electronic or electrical parts and equipment; salvages and returns to inventory parts from outdated equipment to maintain inventory of such new and used electronic or electrical equipment.
5. Provides cost estimates before purchase of materials required in various electronic experiments to improve efficiency of the operations of the agency electronic equipment and/or systems.
6. Instructs students in the use of electronic equipment, safety measures, etc.

V. DIFFERENCES BETWEEN LEVELS IN SERIES:

Electronics Technician II:

Incumbents of positions at this level also:

1. Analyze malfunctions to determine procedures for repair and/or need for outside contractors and recommend the purchase of new equipment when necessary.
2. Train employees on the job and evaluate employee work performance to maintain high levels of efficient productivity.
3. Maintain files on any of the following: purchase orders, personnel actions, work schedules, accidents or grievances, preventive maintenance, etc. to ensure proper documentation of such subjects.
4. Attend meetings, conferences, etc. to gather and exchange information.

VI. RELATIONSHIPS WITH OTHERS:

Major work contacts include agency staff, students and salespersons.

VII. SUPERVISION RECEIVED:

Electronics Technician I:

Incumbents of positions at this level receive direct and/or general supervision from Electronic Technicians or other employees of higher grade who provide instruction, assign work and review performance through inspection for quality and compliance with instructions and procedures.

Electronics Technician II:

Incumbents of positions at this level receive general supervision from employees of higher grade who provide instruction, assign work and review performance through inspection and reports for quality and compliance with instructions and procedures.

VIII. SUPERVISION EXERCISED:

Electronic Technician I:

None.

Electronics Technician II:

Incumbents of positions at this level exercise direct supervision (i.e., not through an intermediate level supervisor) over, assign work to and review the performance of 1-5 technical or other personnel.

IX. WORKING CONDITIONS:

Electronic Technicians stand for prolonged periods of time; lift heavy objects; travel for job-related purposes; are subject to dangers associated with radiation and high voltage; and may travel for job related purposes.

X. QUALIFICATIONS REQUIRED AT HIRE FOR ALL LEVELS IN SERIES:

1. Knowledge of the principles, theories and practices of electronics.
2. Knowledge of the types and uses of testing equipment and procedures and techniques for conducting electronic tests.
3. Knowledge of the types and uses of precision measuring equipment and devices such as micrometers, calipers, etc.
4. Knowledge of calibration and/or adjustment techniques as applied to the various types of equipment used in electronics work.
5. Knowledge of the terminology, codes, symbols, and standard abbreviations used in electronics.
6. Knowledge of the types and uses of materials and equipment used in electronics work.
7. Knowledge of the safety practices and precautions observed in electronics work.
8. Knowledge of the principles and techniques of mechanical and electronic drafting.
9. Knowledge of the types and uses of drafting instruments and equipment.
10. Knowledge of the types and uses of small hand-held tools such as hammers, saws, screwdrivers, chisels, drills, etc.
11. Ability to understand and apply the laws, rules, regulations, procedures, guidelines, policies, etc. governing assigned unit activities.
12. Ability to exercise sound judgment and work independently.
13. Ability to communicate effectively in oral expression.
14. Ability to gather information by examining records and documents.
15. Ability to give oral instructions in a precise, understandable manner.
16. Ability to follow oral and written instructions.

16. Ability to deal tactfully with others.
17. Ability to establish and maintain harmonious working relationships with others and to establish rapport with persons from different ethnic, cultural and/or economic backgrounds.
18. Ability to lift and carry heavy objects.
19. Ability to stand for prolonged periods of time.
20. Skill in using hand-held power tools such as power saws, power drills, etc.
21. Skill in using small hand-held tools such as hammers, saws, screwdrivers, chisels, drills, etc.
22. Skill in the use of drafting instruments and equipment.
23. Skill in the use of precision measuring equipment, gauges and instrumentation used in electronics work.
24. Physical stamina and endurance.
25. Manual dexterity.
26. Mechanical aptitude.

Additional qualifications required at hire for Electronics Technician II positions:

1. Ability to give written instructions in a precise, understandable manner.

XI. QUALIFICATIONS ACQUIRED ON JOB FOR ALL LEVELS IN SERIES:

1. Knowledge of the laws, rules, regulations, policies, procedures, guidelines, etc. governing assigned unit activities.
2. Knowledge of the types and uses of agency forms.

Additional qualifications acquired on job in Electronics Technician II positions:

1. Knowledge of the laws, rules, regulations, policies, procedures, specifications, standards and guidelines governing agency operations.
2. Knowledge of the principles, practices and techniques of supervision.
3. Ability to understand, apply and explain the provisions of the laws, rules, regulations, procedures, guidelines and policies governing agency operations.

4. Ability to determine proper format and procedures to assemble items of information in accordance with established guidelines.
5. Ability to plan, assign and coordinate the activities of others.
6. Ability to lead a group of workers.
7. Ability to analyze and determine the applicability of data, to draw conclusions and make appropriate recommendations.

XII. MINIMUM ENTRANCE REQUIREMENTS:

Electronics Technician I:

None.

Electronics Technician II:

Applicants must have at lease (A) one year of full-time, or equivalent part-time, experience in electrical or electronic system repair, the major duties of which included installing, constructing, maintaining and repairing electronic or electrical systems or equipment, or (B) any equivalent combination of the required experience and the substitutions below.

Substitutions:

- I. A certificate from a recognized school above the high school level in electronics or electrical engineering may be substituted for the required experience.\*
- II. An Associate's degree in electronics or electronics technology may be substituted for the required experience.\*
- III. A Bachelor's degree with a major in electronics or electrical engineering may be substituted for the required experience.\*

\*Education toward such a degree/certificate will be prorated on the basis of the proportion of the requirements actually completed.

XIII. SPECIAL REQUIREMENTS:

Based on assignment, possession of a Massachusetts Class 3 Motor Vehicle Operator's License.

Occupational Group 40

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