

# SIGNAL AND TRACK SWITCH REPAIRERS

By: Hunter Baxter

# DUTY

- Install, inspect, maintain, and repair various railroad service equipment on the road or in the shop, including railroad signal systems.
  - Inspect and test operation, mechanical parts, and circuitry of gate crossings, signals, and signal equipment such as interlocks and hotbox detectors.
  - Inspect switch-controlling mechanisms on trolley wires and in track beds, using hand tools and test equipment.
    - Drive motor vehicles to job sites.
- Tighten loose bolts, using wrenches, and test circuits and connections by opening and closing gates.
- Inspect electrical units of railroad grade crossing gates and repair loose bolts and defective electrical connections and parts.
  - Replace defective wiring, broken lenses, or burned-out light bulbs.
- Record and report information about mileage or track inspected, repairs performed, and equipment requiring replacement.
  - Inspect, maintain, and replace batteries as needed.
- Lubricate moving parts on gate-crossing mechanisms and swinging signals.
  - Clean lenses of lamps with cloths and solvents.
- Maintain high tension lines, de-energizing lines for power companies when repairs are requested.
  - Test air lines and air cylinders on pneumatically operated gates.

# EDUCATION REQUIREMENT

- 44 Associate's degree
- 32 Post-secondary certificate Help
- 13 High school diploma or equivalent Help

# TOOLS AND TECHNOLOGY

Ammeters – Clamp-on ammeters

Audio spectrum analyzer – Audio spectrum analyzers

Rail switching systems – Switch machines

Screwdrivers – Multi-tip screwdrivers

Voltage or current meters – Digital voltage meters; Frequency specific volt meters

Electronic mail software – Microsoft Outlook

Facilities management software – Maintenance management software

Internet browser software – Web browser software

Spreadsheet software – Microsoft Excel

Word processing software – Microsoft Word

# SALARY

\$29.15 hourly, \$60,640 annual



# KNOWLEDGE

- **Computers and Electronics** – Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
- **Mechanical** – Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
- **Public Safety and Security** – Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.
- **English Language** – Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- **Engineering and Technology** – Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
- **Transportation** – Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including the relative costs and benefits.