Occupational Profile



Electronic Assemblers, Fabricators, Inspectors and Testers



In the automotive industry, the increasing integration of electric drive train and battery technology, as well as intelligent computing has created demand for electronic components. Electronic Assemblers, Fabricators, Inspectors and Testers assemble using soldering and other hand and power tools to create sub-assemblies and assemblies and uphold quality control for components used in advanced technologies. FOCAL projects an increased demand for Electronic Assemblers, Fabricators, Inspectors and Testers in the automotive industry, with 580 jobs created over the next 10 years.

Where do Electronic Assemblers and Inspectors work?



Vehicle Parts Manufacturing



Navigation, Measuring and Control Instruments Manufacturing



Semiconductor and other Electronic Component Manufacturing



Communications Equipment Manufacturing

What do Electronic Assemblers and Inspectors do?

Electronic Assemblers, Fabricators, Inspectors and Testers solder, assemble, test, and perform other functions related to production and quality control on a variety of electrical components such as wires, wire harnesses, printed circuit boards and more. Common tasks they perform in their daily work can be found below:

- Solder and manually assemble various electronic components such as resistors, diodes, transistors, capacitors, integrated circuits, switches, wires and other electronic parts to designated locations on printed circuit boards
- Install, mount, fasten, align and adjust parts, components, wiring and harnesses to subassemblies and assemblies using hand and small power tools
- Compare test results to specifications and set parts or products aside for repair or replace components or parts as indicated by test equipment

Career pathways & potential earnings of Electronic Assemblers and Inspectors

Assemblers can progress to other roles and positions with the adequate experience and skills:

Electronic Assemblers and Testers



Assemblers and Inspectors start at minimum, and can earn up to \$31/hr depending on seniority and skill level.



Electronic Assembly Supervisors

Experienced and skilled assemblers and inspectors can become supervisors, earning up to \$45/hr.

Manufacturing Managers



Further education and training in management can assist placement in manufacturing management roles, raising maximum earnings up to \$72/hr.

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Electronic Assemblers, Fabricators, Inspectors and Testers can also apply their skills and expertise in other occupations such as the following:

- Machine operators and inspectors, electrical apparatus manufacturing
- Inspectors and testers, mineral and metal processing

How do I become a Electronic Assembler, Inspector and Tester?

Electronic Assembly and Inspection is an entry level trade, with few barriers to entry. Qualifications for Electronic Assemblers and Inspectors may vary depending on the province or company, but the most common requirements include:

- **Minimum Education:** May require a high school diploma. Testers may require post-secondary courses in basic electronic theory, testing techniques and testing equipment.
- **Certification and Licensing:** Saskatchewan offer a voluntary two-year apprenticeship program and trade certification for electronics assemblers.
- **Training and other requirements:** Electronics inspectors and testers may require experience as an electronics assembler or component fabricator. On-the-job training is usually provided.





What are the most important skills to have as an Assembler or Inspector?

Assemblers and inspectors acquire important skills through their training, as well as the experience accumulated as part of their job in production. Knowledge of electrical theories and experience interpreting designs may prove beneficial in succeeding as an Assembler and entering Inspection roles.

Technical Knowledge and Skills

- Quality Control Analysis
- Computer Aided Design and Manufacturing (CAD/CAM) Software
- Production and Processing
- Mechanics
- Operations Monitoring
- Analytical or Scientific Software

Soft Skills

- Coordination
- Judgement and Decision Making
- Communication
- Time Management
- Manual Dexterity
- Arm-Hand Steadiness

Future of Electronic Assembly jobs in Canada

The job market for Electronic Assemblers and Inspectors is promising. More than 12,000 assemblers were employed across Canada in 2021, with many employed in automotive parts manufacturing. FOCAL projects nearly 580 electronic assembly job openings between 2021 and 2030. FOCAL also forecasts that during the same period, almost 510 workers will be needed to fill recruitment gaps in the sector. New electrification trends in automotive drivetrain and battery manufacturing will allow Electronic Assemblers, Fabricators, Inspectors and Testers to work on new and exciting technologies within the sector.

Learn more about the job market for electronic assembly and inspection, as well as about many other developments and new technologies in Canada's automotive manufacturing by visiting our website <u>futureautolabourforce.ca</u>.

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