

Electrical and Electronics Installers and Repairers

SOC: 49-2092 • Career Profile Report

■ Key Facts

<div>\$71,270</div> <div>Median Salary</div>	<div>118,800</div> <div>Employment</div>	<div>+0.0%</div> <div>Growth Rate</div>
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■ Requirements & Salary Range

Education: See Requirements (BLS)

■ Automation Risk Assessment

Low Risk - 25.0% probability of being automated in the next 10-20 years.
This job is relatively safe from automation due to its creative, social, or complex problem-solving requirements.

■ Work-Life Balance

7.3/10 - Good work-life balance

■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	8.8/10	Investigative	7.4/10
Artistic	4.4/10	Social	5.6/10
Enterprising	4.6/10	Conventional	6.4/10

■ Top Skills Required

Color vision, Communication skills, Physical stamina, Physical strength, Technical skills, Troubleshooting skills

✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

■ Challenges

- Burnout Risk
- Rapid Technological Change

■ What They Do

Electrical and Electronics Installers and Repairers typically perform the following tasks:

- Inspect and test equipment to locate damage or worn parts and diagnose malfunctions, or read work orders or schematic drawings to determine required repairs.
- Reassemble repaired electric motors to specified requirements and ratings, using hand tools and electrical meters.
- Measure velocity, horsepower, revolutions per minute (rpm), amperage, circuitry, and voltage of units or parts to diagnose problems, using ammeters, voltmeters, wattmeters, and other testing devices.
- Repair and rebuild defective mechanical parts in electric motors, generators, and related equipment, using hand tools and power tools.
- Lift units or parts such as motors or generators, using cranes or chain hoists, or signal crane operators to lift heavy parts or subassemblies.
- Record repairs required, parts used, and labor time.
- Disassemble defective equipment so that repairs can be made, using hand tools.
- Adjust working parts, such as fan belts, contacts, and springs, using hand tools and gauges.
- Lubricate moving parts.
- Read service guides to find information needed to perform repairs.
- Inspect electrical connections, wiring, relays, charging resistance boxes, and storage batteries, following wiring diagrams.
- Scrape and clean units or parts, using cleaning solvents and equipment such as buffing wheels.
- Weld, braze, or solder electrical connections.
- Verify and adjust alignments and dimensions of parts, using gauges and tracing lathes.
- Steam-clean polishing and buffing wheels to remove abrasives and bonding materials, and spray, brush, or recoat surfaces as necessary.
- Set machinery for proper performance, using computers.
- Test equipment for overheating, using speed gauges and thermometers.
- Reface, ream, and polish commutators and machine parts to specified tolerances, using machine tools.
- Maintain stocks of parts.
- Cut and form insulation, and insert insulation into armature, rotor, or stator slots.

*Generated by StartRight • Data from U.S. Bureau of Labor Statistics & O*NET*

Source: <https://www.bls.gov/ooh/installation-maintenance-and-repair/electrical-and-electronics-installers-and-repairers.htm>