

Repairs



AFi Systems: Expert Industrial Repair Services

AFi Systems LLC, headquartered in Charlotte, North Carolina, is a leader in industrial electromechanical repair, with over 350 years of combined technician experience. Specializing in industrial automation and electronic control system repairs, we tackle the most challenging issues, including those once deemed “impossible,” through advanced reverse engineering and system redesign. From drives and PLCs to servo motors and hydraulic valves, AFi Systems restores your equipment to peak performance, offering both in-house flat-rate repairs and on-site field services. Our commitment goes beyond repairs—we provide preventive maintenance advice and equipment upgrade recommendations to enhance reliability and efficiency. Serving customers across the United States and globally, AFi Systems is your trusted partner for all industrial repair needs.

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Comprehensive Repair Services

A circular inset image showing a technician with blonde hair, wearing a light grey long-sleeved shirt and blue jeans, sitting on a black swivel chair and working on a computer in a workshop setting. The background shows various electronic equipment and tools on shelves.

AFi Systems handles all types and makes of industrial equipment, delivering unmatched expertise in electronics, servo motors, drives, hydraulics, and more. Our state-of-the-art repair facility is equipped with the latest testing and diagnostic technology, supported by certified technicians, we continuously invest in training to stay at the forefront of industry advancements.

Why Choose AFi Systems?

AFi Systems stands out for its commitment to quality, efficiency, and customer satisfaction:

- **Certified Technicians:** Our team uses a thorough diagnostic process to ensure accurate repairs.
- **Free Evaluations:** No upfront costs for assessing your equipment.
- **No-Fix, No-Fee Policy:** You pay only for successful repairs.
- **Quick Turnaround Times:** Rush repairs, sometimes complete the same day.
- **State-of-the-Art Equipment:** Advanced testing and diagnostic tools for precision.
- **Two-Year Warranty:** Industry-leading assurance on all electronic repairs.

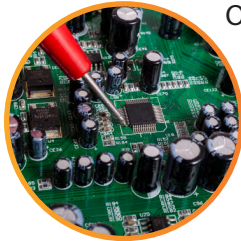


Innovative Repairs

Our engineers are innovators, developing custom solutions for complex challenges. Capabilities include:

- **Reverse Engineering:** Recreating functionality for discontinued or obsolete components.
- **System Redesign:** Upgrading systems to improve performance and reliability.
- **Custom Testing Systems:** Tailored diagnostic tools for specific customer needs.

Electronics Repairs



Our electronics repair services cover a wide range of components and systems, ensuring compatibility with any manufacturer or industry. Services include:

- **PLC Repairs:** All brands of programmable logic controllers covered.
- **HMI Repairs:** From touchscreen replacement to full repair and program backup.
- **Automation Repairs:** Servicing sensors, relays, and other automation components.
- **Servo Drive Repairs:** Diagnosing and repairing AC and DC servo drives for precision applications.
- **Control Panel Repairs:** Restoring damaged or outdated control panels to full functionality.
- **Circuit Board Repairs:** Component-level repairs for complex PCBs.
- **Custom Electronic Repairs:** Tailored solutions for specialized or legacy systems.

Servo Motor Repairs



AFi Systems specializes in flat-rate repairs, rebuilds, and replacements for AC and DC servo motors, critical for applications like robotics and CNC machines. Our process includes:

- Diagnosing issues such as encoder failures, bearing wear, or winding faults.
- Rebuilding motors with high-quality components.
- Testing under load to ensure performance meets manufacturer specifications.

Drive Repairs



With ISO-qualified technicians, AFi Systems excels in repairing Variable Frequency Drives (VFDs), AC Drives, DC Drives, and more. We support brands like Allen-Bradley, ABB, Siemens, and Yaskawa, addressing issues like:

- Overcurrent faults.
- Capacitor degradation.
- Power semiconductor failures.

Hydraulic Repairs



AFi Systems has developed in-house, state-of-the-art equipment to test and diagnose servo, proportional, and hybrid-style hydraulic valves. Our services include:

- Identifying leaks, pressure issues, or valve sticking.
- Reconditioning or replacing seals, spools, or solenoids.
- Calibrating valves for precise control.

Technological Innovations

AFi Systems stays ahead of the curve with:

- **Custom Diagnostic Tools:** In-house developed testing systems for unique customer needs.
- **Reverse Engineering Expertise:** Solutions for discontinued components, ensuring compatibility with original designs.
- **Advanced Testing Equipment:** State-of-the-art tools for precise diagnostics and validation.
- **Sustainable Practices:** Upgrading systems to improve energy efficiency and reduce waste.
- **In-circuit IC tester:** Functional testing of digital and analog ICs, as well as mapping of good boards for future comparison of faulty units.

