

How a Tier 1 Automotive Supplier Reduced Burnout and Regained Control of Their Maintenance Operations



The Challenge: Too Many Fires & Too Few Technicians

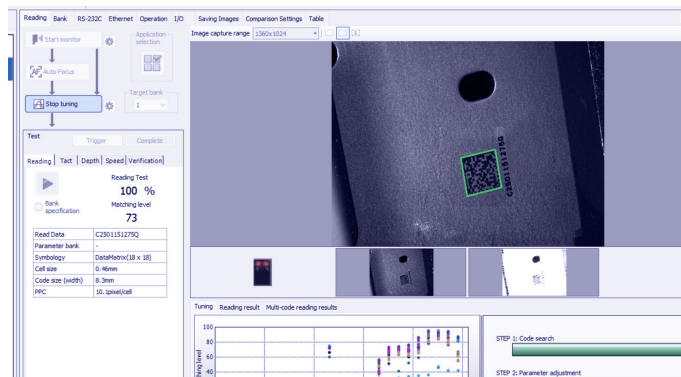
This Tier 1 automotive supplier operates three shifts daily, often including weekends to recover lost production. Each shift should be supported by two automation technicians—but high turnover driven by burnout had reduced the team from six to just two. With weekend work and late-night breakdowns becoming routine, the remaining staff was stretched to the limit.

To make matters worse, pandemic-era supply issues had forced the plant to adopt a patchwork of PLCs, robots, barcode scanners, and conveyor components—many of which required brand-specific training and troubleshooting procedures. Equipment ranged from Allen-Bradley PLCs to Keyence barcode scanners and Mitsubishi-controlled robots.

And with four unfilled engineering roles, no one had time for root cause analysis or proper documentation. It was all reactive, all the time.

The Blue Ridge Advantage: Shift Coverage, Documentation, and Long-Term Planning

To stabilize operations, Blue Ridge deployed experienced automation technicians for second and third shifts within a single business day. These techs didn't just fill gaps—they made an impact. During downtime, they created documentation tailored to the facility's equipment—like how to reset a barcode scanner using AutoID Network Navigator, safely adjust focus/matching levels, or restore IP connections after a duplicate address error.

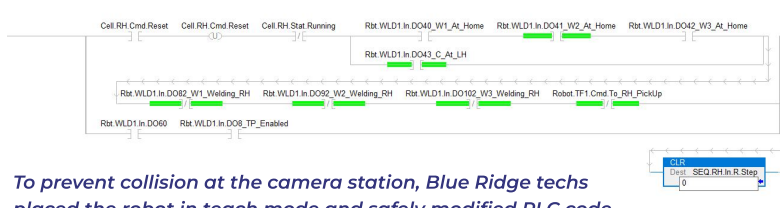


Step-by-step reset instructions were created for Keyence barcode scanners using AutoID Network Navigator, including restoring IP settings after a duplication fault.



Metric	Before Blue Ridge	After Blue Ridge
Available Technicians per Shift	0 - 1 (short-staffed)	2-3 (fully staffed)
Overtime Hours per Week	35 - 40 hours	5-10 hours
Emergency Calls per Month	12 - 15	2-3
Downtime Events per Month	18 - 20	5-7
Average Time to Resolve Issue	2+ hours	<30 mins
Documentation Availability	Minimal	Extensive, step by step

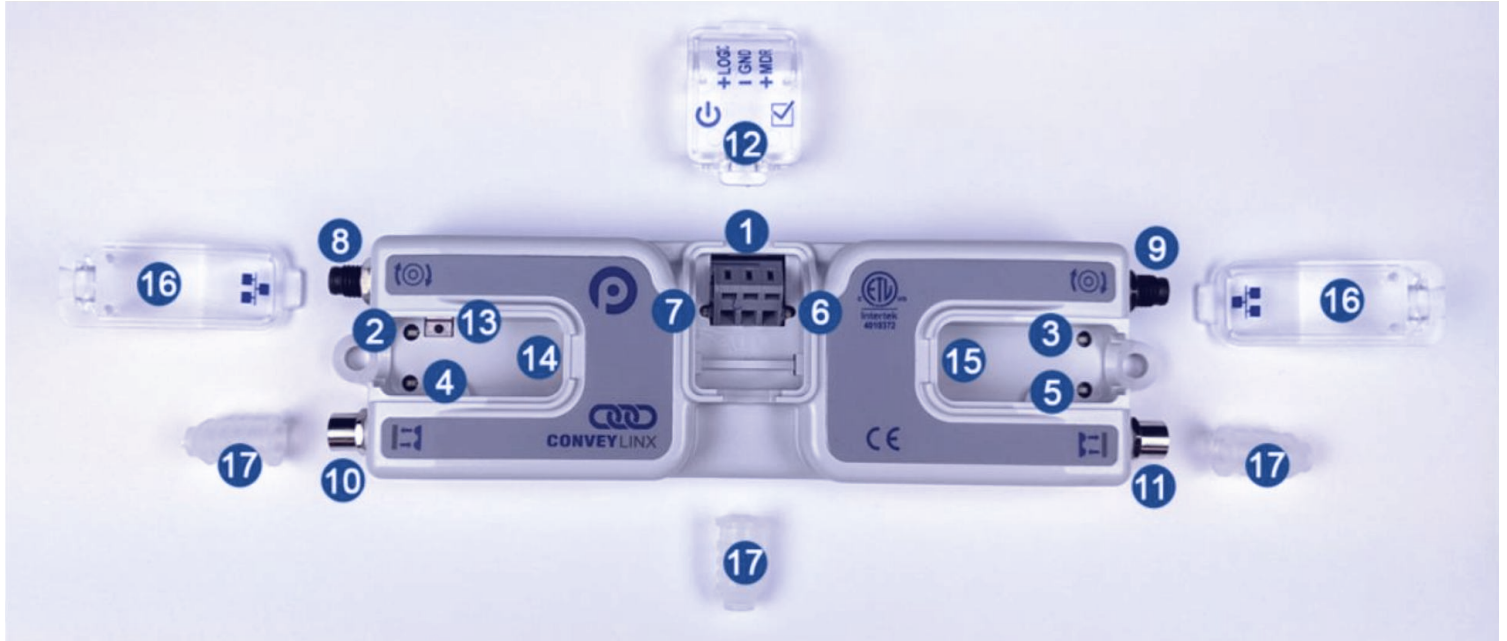
They also built step-by-step guides for troubleshooting robot stoppages and conveyor faults. For example, when a pallet was stuck at a camera station, Blue Ridge techs referenced and refined PLC code interactions in the Seat Assembly Daifuku Line A logic, toggling the correct values to release the pallet without risking a crash. Similarly, they mapped out sequences to safely reset LH and RH cells in a pack line using both PLC programs and pendant-based digital outputs.



To prevent collision at the camera station, Blue Ridge techs placed the robot in teach mode and safely modified PLC code in Seat Assembly Daifuku Line A to release the pallet.

On another shift, a faulty outbound ASRS module halted pallet movement. A Blue Ridge technician diagnosed the issue, verified power to the IP module, and replaced the card using precise steps for reconnecting and configuring network settings. Their ability to jump across systems—from Mitsubishi robots to ConveyLinx Ai2 cards configured in EasyRoll—gave the customer peace of mind and reduced technician stress.

Diagnosing and replacing ASRS IP modules was streamlined with a documented checklist and visual guide—saving hours of downtime.



- 1 24VDC Power Terminals with separate connection for Logic and Motors 2 & 3 Motor Left LED & Motor Right LED - Motor status indicators
- 4 & 5 Left Sensor & Right Sensor Status LED Indicators 6 Module Status LED Indicator 7 Module Power LED Indicator
- 8 & 9 Motor Left and Motor Right Port (4-pin M8 style connector for MDR connection)
- 10 & 11 Sensor Left and Sensor Right Port (4-pin M8 style connector for zone photo-sensor connection) 12 Removable IP54 Power Compartment Cover
- 13 Module Replacement Button 14 & 15 Link Left and Link Right - RJ-45 style Ethernet network connection between modules including LED indicators
- 16 Removable IP54 Ethernet RJ-45 Port Compartment Cover - Left & Right 17 IP54 Protection Shrouds for Ethernet cabling and power wiring

The Results: Improved Retention, Reduced Overtime, and a Plan to Move Forward

Blue Ridge's involvement stabilized day-to-day operations and gave leadership room to plan ahead. The BRA service director proposed a new 2-3-2 shift model, using six BRA technicians and two internal staff to deliver 24/7 coverage while reducing overtime. This rotation restored work-life balance, boosted morale, and made the job more attractive for new hires.

Meanwhile, Blue Ridge technicians continued to train on the equipment in use—Fanuc, Keyence, Mitsubishi, Allen-Bradley—and produced internal guides based on real production scenarios. As the internal team grew, BRA transitioned responsibility back, helping onboard new hires and scaling their support down while maintaining high availability for critical events.

Today, this supplier is moving away from burnout culture and toward sustainable, proactive maintenance—with Blue Ridge as a trusted partner.

Struggling with burnout, staffing shortages, or reactive maintenance cycles?

Talk to Blue Ridge Automation to build a support system that works — for your people and your production goals.

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