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A Powerful Partnership

The Group Training Academy (TGTA)

The Group Training Academy (TGTA), powered by AVI, is the training division of the Automotive Parts Services Group (APSG), also known as The Group. Formed through a partnership of leading aftermarket organizations, TGTA was created to provide high-quality training to help shops and technicians keep pace with rapidly advancing vehicle technology.

In partnership with Automotive Video Innovations (AVI) since 2015, TGTA delivers industry-leading online, hands-on, and classroom training designed to support technician and educator success.

Automotive Video Innovations (AVI)

Founded in 1994, Automotive Video Innovations (AVI) is a leader in automotive training, delivering award-winning content and hands-on learning solutions for technicians and educators. Through AVI OnDemand, live training, and the AVI Technical Academy, AVI provides high-quality instruction designed to bridge the gap between classroom learning and real-world application.



Accredited Training Provider

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LIVE TRAINING

HANDS-ON TRAINING: AT OUR PLACE OR YOURS

GAIN REAL-WORLD EXPERIENCE THROUGH EXPERT-LED, HANDS-ON WORKSHOPS DESIGNED TO BUILD TECHNICIAN CONFIDENCE AND SKILL.

WE ALSO OFFER ASE CERTIFICATION PREP.

- ⚡ **ASE Accredited Training Provider**
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- ⚡ **Master-Level Instructors**
- ⚡ **Earn Continuing Education Credits**
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Let us bring the training to you — or join us at AVI Technical Academy.

Whether you come to our Winter Conference in sunny Florida, our Summer Conference in Delphos, Kansas, or join us during our Bosch EV Training Tour, you'll experience top-tier, hands-on learning with industry experts.



Accredited Training Provider

LIVE TRAINING



Classroom Training



Hands-On Training

Section	Course Title	Course #	Format	Credit Hours	Icons
Engine Performance	Advanced Networking Diagnostics	EP-8A108	HOT	8 - 24	

This ATMC award winning course delivers comprehensive training on two key communication systems used in modern vehicles: C.A.N. and C.A.N. FD. Participants will learn the theory, operation, and diagnostic procedures for automotive, light-duty, and heavy-duty truck networks, along with the tools and methods required for effective analysis. Designed for technicians and instructors alike, this course provides the knowledge needed to confidently diagnose and service today's complex vehicle communication systems.



Engine Performance	Push Button Automatic Start-Stop Systems	EP-8A110	LEC	3 - 4	
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Automatic start-stop technology is designed to improve fuel economy and reduce emissions while adding the convenience of keyless entry and push-button starting. This course explores system operation from the key fob to the starter, outlining the diagnostic challenges these technologies present. Technicians will learn proven strategies for troubleshooting and repairing modern start-stop systems with confidence.

Engine Performance	Ford Engine Performance	EP-8A111	LEC	3 - 4	
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As Ford systems evolve with turbocharging and dual fuel strategies, technicians must stay current with emerging technologies. This course covers Ford's new cloud-based scan tool, the J2716 SENT sensor protocol, and variable cam timing systems with their common challenges. Additional topics include advanced cam and crank signal testing and Ford's triple spark ignition systems, equipping technicians with the knowledge to diagnose and repair these modern platforms.

Engine Performance	Ford FDRS Scanner Diagnostics	EP-8A113	LEC / HOT	3 - 24	
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The Ford Diagnostic and Repair System (FDRS) is the next generation scan tool for today's multi-network, multi-control module vehicles. Used by Ford dealerships and repair shops worldwide, FDRS provides powerful capabilities to interface with vehicle systems, networks, and components. This course equips technicians with the knowledge and skills needed to use FDRS effectively for accurate diagnostics and repair.

Engine Performance	GM Engine Performance	EP-8A114	LEC	3 - 4	
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This course provides the knowledge and skills needed to diagnose and repair modern GM vehicles. Learn to master the GM Global Diagnostic System (GDS) scan tool and use its advanced features for efficient troubleshooting. Training covers common engine problems, essential transmission procedures, and emerging sensor technologies. Special focus is placed on brushless low-pressure fuel pumps and their role in today's complex fuel systems, ensuring technicians are equipped to handle the latest GM platforms.



Classroom Training



Hands-On Training

Section	Course Title	Course #	Format	Credit Hours	Icons
Suspension and Steering	Alignment Angles	SS-4A109	LEC	3 - 4	

A wheel alignment adjusts the angles of the wheels so they are perpendicular to the ground and parallel to each other. Proper alignment ensures maximum tire life and a vehicle that drives straight and true. This course walks through the essential steps and procedures for performing accurate alignments on a variety of vehicles.

Brakes	Brake System Service	BK-5A109	LEC / HOT	3 - 24	
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Coverage includes hydraulic systems, fluids, lines, hoses, valves, switches, power assist units, wheel bearings, brake control units, ABS, parking, and drum brake systems. Designed for both new students and experienced technicians, the course also emphasizes diagnostic strategies and offers strong preparation for the ASE A5 exam.

Engine Repair	Cooling Systems and Coolants	FL-1A109	LEC	3 - 4	
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This class covers the fundamentals of cooling systems, including thermostats, water pumps, radiator caps, and more. You'll gain practical insight into diagnostics, the tools needed to complete repairs correctly, and the differences between coolant types and their benefits.

Electrical & Electronics	Electrical Fundamentals	EL-6A109	HOT	8 - 16	
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Build a strong foundation in diagnosing and repairing electrical systems. Coverage includes circuit types, Ohm's law, voltage drop testing, and the primary components found on most vehicles. Training with AVI's Electrical Training Board (ETB) provides practical experience and real-world diagnostic techniques. Designed for entry-level and novice technicians, the program develops essential skills that lead to long-term growth and shop productivity.



Electrical & Electronics	Electrical Diagnostic Strategies	EL-6A110	HOT	8 - 16	
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Designed for technicians ready to advance beyond the basics, this course focuses on applying sophisticated diagnostic processes to complex modern vehicle circuits. You'll learn how to set up and interpret signals with a lab scope, from capturing baseline waveforms to advanced pressure diagnostics. Real-world case studies and scope applications help sharpen your troubleshooting skills, giving you the confidence and accuracy needed to quickly pinpoint electrical faults. This training builds directly on fundamental knowledge and elevates technicians into the next level of diagnostic expertise.



Classroom Training



Hands-On Training

Section	Course Title	Course #	Format	Credit Hours	Icons
Electrical & Electronics	Introduction to Lab Scopes	EL-6A209	LEC	3 - 8	

This course introduces technicians to the essential use of lab scopes for modern vehicle diagnostics. Learn how to set up your scope, capture baseline signals, and interpret waveforms for pinpoint accuracy in identifying faults. Real-world case studies and advanced techniques, including pressure waveform analysis, provide practical experience to build confidence and speed in troubleshooting. By mastering scope-based diagnostics, technicians elevate their skills and stay ahead in today's rapidly evolving automotive technology.

Electrical & Electronics	Advanced Lab Scope Testing Techniques	EL-6A210	HOT	16	
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Take your diagnostic skills to the next level with advanced training in lab scope use. This course covers capturing and interpreting complex waveforms, from baseline signals to detailed pressure analysis, giving you the tools to diagnose even the toughest electrical faults. Real-world examples and case studies demonstrate how to apply lab scopes for fast, accurate troubleshooting, helping you master a skill set that is indispensable in today's rapidly evolving automotive industry.

Electrical & Electronics	Modern Lighting Systems	EL-6A309	LEC / HOT	3 - 8	
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From early lanterns to today's advanced HID, LED, and laser systems, headlights have continually evolved to improve road safety. This course explores modern headlight technologies, including LED micromirror designs and nanotechnology, while explaining key concepts such as candelas, lumens, watts, Kelvin, and pixels. Training also covers generic aiming procedures, DOT regulations, and headlight control systems found in late-model vehicles.

Heating & Air Conditioning	Advanced A/C – 609 Certification	AC-7A609	LEC	3 - 4	
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This class prepares technicians for Section 609 certification while covering the latest trends in automotive A/C systems and refrigerants. Topics include automatic temperature control systems, R-1234yf refrigerant, and advanced diagnostic tools. Training also covers use of pressure gauges, reclaimers/recyclers, and thermal imaging cameras for accurate and efficient A/C service.

Heating & Air Conditioning	Air Conditioning & Heating Systems	AC-7A110	LEC / HOT	3 - 16	
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Learn the fundamentals of thermal-related vehicle systems along with practical strategies for servicing today's advanced heating and air conditioning systems. Training includes both traditional diagnostics and modern procedures for conventional HVAC, as well as electric and hybrid heating and cooling technologies—ensuring technicians are prepared to maintain and repair modern climate control systems.

Engine Performance	C.A.N./C.A.N. FD	EP-8A109	LEC	3 - 4	
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Diagnosing Controller Area Network (C.A.N.) and Flexible Data Rate (C.A.N. FD) concerns are a challenge even for experienced technicians. This course provides in-depth coverage of design, operation, and testing procedures, while explaining multiplexing, networking systems, and how modules integrate on a common communication network.



Classroom Training



Hands-On Training

Section	Course Title	Course #	Format	Credit Hours	Icons
Engine Performance	Advanced Testing Strategies: Catalyst Efficiency, Misfire, and EGR	EP-8A115	LEC	8 - 4	

This course equips technicians with the knowledge and techniques needed to diagnose complex emissions and drivability concerns. Topics include defining and identifying misfires, interpreting Mode 6 catalyst efficiency data, analyzing oxygen sensor operation, and diagnosing EGR system failures related to NOx emissions. Participants will also learn to apply the proper tools and strategies to pinpoint ignition, fuel delivery, and mechanical causes of misfires for accurate and efficient repairs.

Engine Performance	Ignition Systems	EP-8A116	LEC	3 - 4	
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This course provides comprehensive training on modern ignition systems, from traditional distributor setups to coil-on-plug configurations. Technicians will learn spark plug analysis, ignition waveform interpretation, and techniques for diagnosing misfires, combustion issues, and timing concerns. Additional focus is placed on identifying ignition transistor faults and interpreting camshaft and crankshaft sensor waveforms, ensuring accurate diagnostics and optimized engine performance.

Engine Performance	Misfire Diagnosis	EP-8A117	LEC	3 - 4	
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A misfire is more than an annoyance—it's a critical sign of engine health and performance. This training explores the root causes of misfires, from worn piston rings and valves to ignition and fuel system faults. Technicians will learn to use specialized diagnostic tools and scope waveforms to uncover ignition timing issues, cylinder pressure variations, and fuel delivery concerns. Coverage includes both mechanical and ignition/fuel-related misfires, giving participants the expertise to quickly pinpoint and resolve problems for reliable engine performance.

Engine Performance	Drivability Diagnostics with Launch Scan Tools	EP-8A118	HOT	24	
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Modern drivability issues require fast, accurate diagnostics. This training introduces technicians to the capabilities of Launch scan tools for identifying performance problems across engine, transmission, and emissions systems. Learn to navigate scan tool features, interpret live data, and apply proven diagnostic strategies to resolve driveability concerns quickly and confidently.

Engine Performance	GDI Systems	EP-8A119	LEC	3 - 4	
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Gain the knowledge and confidence to diagnose today's GDI systems. Training covers design, operation, and diagnostics, including injector control, charge pump and boost capacitor function, and PCM interaction. Learn to test fuel pressure, temperature, and throttle sensors, as well as high-pressure pumps using scan data and lab scopes. A full section on injector testing explores leak detection, spray pattern, volume, and timing to ensure accurate and efficient repairs.

Engine Performance	Diagnostic Strategies – Is It the Engine?	EP-8A120	LEC	3 - 4	
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Quickly determine whether drivability problems stem from the engine or another system. Learn to apply scan data, lab scopes, and pressure transducers to separate mechanical faults from fuel, ignition, or electronic control issues with confidence.



Classroom Training



Hands-On Training

Section	Course Title	Course #	Format	Credit Hours	Icons
Engine Performance	Diagnostic Strategies – Is It the Fuel?	EP-8A121	LEC	3 - 4	

Fuel delivery problems can mimic ignition and mechanical issues, making accurate diagnosis critical. This course shows how to use scan data, pressure testing, and lab scopes to evaluate pumps, injectors, sensors, and circuits. Learn proven strategies to confirm or rule out fuel-related faults and resolve driveability concerns efficiently.

Engine Performance	Diagnostic Insights	EP-8A122	LEC	3 - 4	
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Strong diagnostics start with a clear process. This course presents proven methods for approaching drivability concerns, using scan data, lab scopes, and pressure analysis to uncover the root cause of problems. Learn how to interpret test results effectively, avoid common pitfalls, and apply insights that lead to faster, more accurate repairs.

Diesel	Diesel Fuel Systems	DS-9A111	LEC	3 - 4	
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Powerstroke, Duramax, and Cummins platforms all present unique fuel system challenges. This course explains proper testing and diagnostics for pumps, filters, lift pumps, and high-pressure systems to prevent unnecessary parts replacement and come-backs. Learn safe, accurate testing methods, the right tools for the job, and step-by-step strategies to diagnose and repair diesel fuel system issues with confidence.

Diesel	Duramax Diagnostics	DS-9A112	LEC / HOT	3 - 24	
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This course delivers in-depth training on diagnosing and repairing Duramax diesel systems. Learn proven processes for tackling driveability concerns such as hard starts and no-starts, along with step-by-step fuel system testing for lift and high-pressure pumps. Coverage also includes fuel quality issues, DPF and SCR diagnostics, and strategies for using scan tools to pinpoint performance problems accurately. Reduce diagnostic time, avoid unnecessary parts replacement, and gain confidence in solving complex Duramax challenges.





Classroom Training



Hands-On Training

Section	Course Title	Course #	Format	Credit Hours	Icons
Diesel	Power Stroke 6.7 Diagnostics	DS-9A113	LEC / HOT	3 - 32	

Master the diagnostic and repair strategies needed for today's Ford Power Stroke 6.7 diesel engines. Training covers drivability challenges such as hard starts and no-starts, along with fuel system testing for lift and high-pressure pumps. Learn how fuel quality impacts performance, explore proven procedures for diagnosing DPF and SCR complaints, and apply scan tool strategies to pinpoint engine performance issues quickly. Reduce diagnostic time, prevent unnecessary parts replacement, and gain confidence in servicing Power Stroke 6.7 systems.

Diesel	Cummins 6.7 System Operations & Diagnostics	DS-9A114	LEC / HOT	3 - 24	
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Stay up to date with the latest developments in Cummins 6.7 engines. Training covers design changes since 2019, highlighting performance and durability improvements along with new diagnostic challenges. Key focus areas include high-pressure pump and injector failures, valvetrain and turbocharger issues, and emissions system concerns.

Diesel	6.7L Power Stroke Preventative Maintenance	DS-9A115	HOT	8	
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Preventing failures is just as important as fixing them. This course outlines the key maintenance practices that keep Ford's 6.7 Power Stroke engines running reliably. Topics include fluid and filter service intervals, monitoring common wear components, addressing fuel quality concerns, and inspecting emissions and turbo systems before they fail. By applying these strategies, technicians can help customers extend engine life, reduce downtime, and avoid costly repairs.

Electrified Vehicles	Air Conditioning Service	EV-3L109	LEC / HOT	3 - 16	
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Expand your service offerings with in-depth coverage of hybrid and electric vehicle A/C systems. This course includes component identification, A/C theory, compressor types, refrigerant pressure/temperature relationships, inverter placement, and proven diagnostic strategies. You'll learn the design, operation, and testing of today's evolving systems to confidently tackle A/C challenges in HEV and BEV platforms.

Training is powered by AVI's award-winning Chillinator, a fully functional training aid that replicates modern hybrid and EV A/C systems. With hands-on demonstrations and real-world application, you'll leave with the skills and confidence to service advanced automotive climate control systems.



Electrified Vehicles	Systems & Diagnostics	EV-3L110	LEC / HOT	3 - 8	
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The service needs of hybrid and electric vehicles are expanding rapidly. Coverage includes HEV/BEV components such as motors, batteries, regenerative braking, and power electronics. Learn critical maintenance practices including fluid service, battery and thermal management, and proper power-down procedures to ensure safety and vehicle longevity.



Classroom Training



Hands-On Training

Section	Course Title	Course #	Format	Credit Hours	Icons
Electrified Vehicles	Systems & Diagnostics (Safety & Repair)	EV-3L111	HOT	8 - 24	

Learn diagnostic and repair strategies for high-voltage vehicles, with emphasis on safety and proper service procedures. Coverage includes unique HEV/BEV components, their operation, and effective diagnostic methods, including preparation for safe interaction and correct use of protective equipment.

Electrified Vehicles	Motors & Power Management	EV-3L112	HOT	8	
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Build expertise in hybrid and electric vehicle power systems. Topics include inverter operations, IGBTs, DC-DC converters, and high-voltage testing procedures. Gain insights into three-phase motors, permanent magnet and induction types, motor windings, and failure diagnostics, as well as motor integration with gear trains for safe, efficient performance.

Electrified Vehicles	Ford Mach-E	EV-3L113	LEC	3 - 4	
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The Ford Mach-E brings cutting-edge EV technology to the shop—are you ready? Coverage includes computer strategies, scan data interpretation, battery testing, charging, and maintenance. Learn essential safety practices and develop a diagnostic process tailored to electrified vehicles.

Electrified Vehicles	Ford Lightning	EV-3L114	LEC	3 - 4	
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Be prepared to service the fast-growing Ford Lightning platform. Coverage includes computer strategies, scan data interpretation, battery testing, charging, and safety procedures with proper PPE and specialty tools. Explore drivetrain components, inverter/converter systems, motor designs, cooling and AC systems, and diagnostic techniques tailored to EV service.

Electrified Vehicles	Nissan Leaf	EV-3L115	LEC	3 - 4	
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Our Leaf Cutaway is a 2025 Motor Top 20 award Winner! Dive into the technology behind one of the most widely adopted EVs on the road today. Coverage includes computer strategies, scan data interpretation, battery testing, charging, and maintenance procedures for the Nissan Leaf. Safety practices, proper PPE use, and step-by-step diagnostic processes provide the foundation for servicing this platform with confidence.

Electrified Vehicles	Toyota Sienna Hybrid	EV-3L116	LEC	3 - 4	
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Stay current with the latest updates on Toyota's advanced hybrid systems. Coverage includes predictive HV battery state-of-charge technology, use of the GTS Toyota scan tool, and diagnostic procedures for batteries, inverters, and motor generators. Essential safety practices and routine maintenance are also included.

Questions? Reach out to us by calling 800-718-7246 or email: support@aviondemand.com



Section	Course Title	Course #	Format	Credit Hours	Icons
Electrified Vehicles	Chevy Bolt	EV-3L117	LEC	3 - 4	

Introduced in 2017, the Chevy Bolt and Bolt EUV share the same powertrain and have become popular, affordable EV options. Coverage includes key components, diagnostics, and service strategies, with insights into GM's design approach for extended driving range.

Electrified Vehicles	Tesla Diagnostic Fundamentals	EV-3L118	LEC	3 - 4	
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Gain the skills to safely and effectively service Tesla vehicles. Coverage includes shutdown and isolation procedures, service information resources, scan tool use, and PID data interpretation. Explore Tesla's self-driving hardware, three-phase motors, high-voltage batteries, and charging systems, along with procedures such as jump-starting and safe charging practices.

Electrified Vehicles	Chevrolet Blazer EV Technology	EV-3L119	LEC	3 - 4	
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Explore the innovative Chevy Blazer EV with a focus on safe handling of high-voltage systems and essential testing practices. Learn charge connector types, inverter operation, and the role of IGBTs in the powertrain. Diagnostic strategies include measuring for isolation faults and using specialized tools to maintain system integrity and reliability.

Electrified Vehicles	Hybrid & EV Drivetrains	EV-3L120	LEC	3 - 4	
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Understand the design and operation of modern hybrid and EV drivetrains. Topics include power flow, gear reduction, torque multiplication, and the performance characteristics of electric motors compared to gasoline engines. Explore BEV gear trains through advanced transaxle systems to build confidence in diagnosing and servicing these components.

Electrified Vehicles	Battery Technology	EV-3L121	LEC	3 - 4	
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Explore the design and operation of high-voltage EV batteries, from Nickel-Metal Hydride (NiMH) to lithium-ion systems. Learn cell, module, and section structures, along with essential safety protocols for testing. Develop skills in scan data interpretation, balancing, reconditioning, and thermal management to ensure reliable battery performance and longevity.

Electrified Vehicles	Inverters	EV-3L122	LEC	3 - 4	
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Build expertise in inverter operation and the role of Insulated Gate Bipolar Transistors (IGBTs) in hybrid and electric vehicles. Learn to analyze voltage and amperage waveforms, test for isolation faults, and evaluate capacitors. Diagnostic strategies include DC-DC converter testing, distinguishing buck and boost operations, and assessing high-voltage contactors.

Electrified Vehicles	Three Phase Motors	EV-3L123	LEC	3 - 4	
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Master the operation and diagnostics of three-phase automotive motors. Learn to identify components, distinguish between permanent magnet and induction types, evaluate motor windings, and analyze motor and bearing failures. Explore how three-phase motors interact with gear trains to ensure reliable vehicle performance.



Classroom Training



Hands-On Training

Section	Course Title	Course #	Format	Credit Hours	Icons
Electrified Vehicles	Charging Stations	EV-3L124	LEC	3 - 4	

Stay ahead with a clear understanding of EV charging systems. Coverage includes charge connectors, pin assignments, on-board charger operation, and Level 1–4 charging differences. Learn to size home chargers, use mobile apps for charging access, and make informed decisions about installation, operation, and utilization of charging stations.

Electrified Vehicles	GM Electric & Hybrid Vehicles	EV-3L125	LEC	3 - 4	
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Explore the technology and safety practices essential for servicing GM's electrified platforms. This course compares the drivetrains of the Bolt, Blazer, and Volt, and covers inverter operation, IGBTs, and high-voltage testing for isolation faults. Learn proper safety protocols and gain insights into the specialized tools required for HEV and BEV diagnostics.

Electrified Vehicles	Hybrid & EV Test Tools	EV-3L126	LEC	3 - 4	
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Gain a comprehensive understanding of six essential diagnostic tools for servicing hybrid and electric vehicles, including milli-ohm meters, insulation resistance testers, and high-voltage DVOMs. Learn proper use of personal protective equipment and explore real-world diagnostic applications to ensure safe, accurate, and efficient repairs.

Electrified Vehicles	Toyota 4th Generation	EV-3L127	LEC	3 - 4	
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Master the latest Toyota hybrid technology with a focus on fourth-generation Prius systems. Coverage includes drivetrain updates, high-voltage safety, battery handling, and use of factory scan data. Learn torque distribution between engine and motors, and gain a deeper understanding of three-phase motors, inverters, and DC-DC converters.

Electrified Vehicles	Hybrid/EV Safety	EV-3L128	HOT	8	
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Safety is the top priority when working with hybrid and electric vehicles. Coverage includes shutdown and power-down procedures, proper use of PPE, and safe handling of high-voltage batteries and components. Learn to identify hazards, avoid technician errors, and apply industry-recommended protocols to ensure safe and compliant repairs.

Electrified Vehicles	Ford F-150 & Explorer Hybrid Systems	EV-3L129	LEC	3 - 4	
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Be ready to service Ford's most popular hybrid platforms. Coverage includes design and operation of the F-150 and Explorer hybrid drivetrains, battery and motor integration, regenerative braking, and power management strategies. Learn key diagnostic approaches, scan data interpretation, and essential safety practices for working with high-voltage components.

ADAS	A Service Advisor's Guide to ADAS	DA-4L109	LEC	3 - 4	
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Learn how to communicate the value of Advanced Driver Assistance Systems (ADAS) services to your customers. This course explains key components such as cameras, radars, blind spot detection, and park assist sensors, while reviewing aftermarket service opportunities, calibration needs, and common concerns. Gain the knowledge to build customer confidence and support proper ADAS maintenance in your shop.



Classroom Training



Hands-On Training

Section	Course Title	Course #	Format	Credit Hours	Icons
ADAS	ADAS – Service & Diagnostics	DA-4L110	LEC / HOT	8 - 24	

Stay ahead with the skills to service today's ADAS technology. This course covers cameras, radars, blind spot detection, and park assist sensors, with emphasis on safety, precision, calibration, and diagnostic procedures. Gain the knowledge to confidently maintain and repair these rapidly growing systems while addressing common concerns and misconceptions.

Heavy Duty	Cummins 6.7, L9 & X15	DS-2T109	LEC / HOT	8 - 24	
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Master diagnostics on the Cummins 6.7, L9, and X15 platforms. Coverage includes design and function of mechanical, electrical, and fuel systems, along with programming and calibration procedures. Learn to integrate lab scopes, apply time-saving diagnostic strategies, and use specialty tools for lifter and camshaft service. Updates on hydraulic lifters and the newest 6.7 engines ensure you stay current with the latest Cummins technology.



Heavy Duty	Emissions & Aftertreatment Systems	DS-2T110	HOT	24	
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Heavy-duty emission systems have grown increasingly complex—are you up to date? Gain the latest information on system operation and diagnostics, from engine and fuel injection strategies to aftertreatment components, and be prepared to service them all with confidence.

Medium Duty	International CV Duramax L5D	DS-2T112	LEC	3 - 4	
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Develop the knowledge to diagnose and service the International CV equipped with the Duramax L5D engine. Coverage includes engine design and operation, fuel and emissions systems, and electronic controls. Learn strategies for troubleshooting drivability concerns, interpreting scan data, and applying time-saving diagnostic techniques tailored to medium-duty applications.

Heavy Duty	Cummins Insite Scanner Diagnostics	DS-2T113	LEC	3 - 4	
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Master Cummins Insite and QuickServe to diagnose and repair heavy-duty engines with confidence. Explore aftertreatment testing, bi-directional functions, ECM calibration, and system-specific diagnostics. QuickServe adds maintenance procedures, wiring diagrams, TSBs, fault code search, and parts lookup to streamline troubleshooting and repairs.



Classroom Training



Hands-On Training

Section	Course Title	Course #	Format	Credit Hours	Icons
Heavy Duty	International Diamond Logic	DS-2T114	HOT	16	

Gain a clear understanding of International Diamond Logic electrical system, designed to integrate and optimize vehicle performance. Learn to interpret wiring diagrams, navigate system architecture, and diagnose body control modules, multiplexing, and programmable features. Develop strategies to troubleshoot electrical faults and apply best practices for maintaining International trucks.

Medium Duty	International CV Duramax L5D Master Class	DS-2T115	HOT	32	
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Take an in-depth look at the International CV equipped with the Duramax L5D engine. Coverage includes engine design, fuel and emissions systems, electronic controls, and drivetrain integration. Learn advanced diagnostic strategies, scan data interpretation, and proven troubleshooting techniques to resolve performance and drivability concerns in medium-duty applications.

ASE Test Prep	T2 ASE Test Prep – Diesel Engines	DS-2T116	HOT	24	
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Prepare with confidence for the ASE T2 Diesel Engines certification exam. Review diesel engine design, operation, and performance systems, with emphasis on fuel, air induction, cooling, lubrication, and exhaust systems. Practice test questions and study strategies help reinforce knowledge and improve exam readiness—ideal for technicians seeking certification or recertification.

Heavy Duty	Air Brake Operation & Diagnosis	BK-4T109	HOT	16 - 32	
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Master the complexities of heavy-duty air brake systems, including compressors, governors, ABS, and related components. Learn how wheel speed sensors, tone wheels, and their circuits interact with controllers, while emphasizing diagnostic strategies, time-saving troubleshooting methods, proper adjustments, and safe service procedures.

Shop Management	Hire the Best, Forget the Rest / Preparing Your Shop for EVs	SM-1C109	LEC	8	
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Develop the skills to become a trusted link between customers and technicians. Learn proven communication strategies, estimate writing, and scheduling techniques to improve workflow, increase sales, and build stronger customer relationships.

Custom	Create Your Own Course	CSTOM-	LEC/HOT	3 - 32	
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Create your own Custom Course. Contact us today. 800-718-7246

Hydraulic Systems	NEW	HS-1E101	LEC/HOT	3-26	
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Gain a solid foundation in hydraulic principles, maintenance, and diagnostics. Learn how piston sizing, pressure dynamics, and fluid mechanics affect system performance. Topics include pump operation, valve control, hose building and selection, fluid and hose maintenance, and common failure points. Safety practices are emphasized through pre-course training and demonstrations. By the end, participants will have the knowledge and skills to service, diagnose, and maintain hydraulic equipment with confidence.

POPULAR THREE DAY TRAINING COURSES!

Two great courses combined!

Hybrid Vehicle Technology

Suitable Audience: A, B, and C Technicians, Shop Owners/Managers, Service Advisors, Parts Professionals.

Course Length: 16 hrs.

Course Description:

This course will give an in-depth view and discuss the proper safety procedures when handling hybrid vehicle high voltage circuits.

Participants will be engaged with hands-on activities focusing on the proper diagnostics and testing of high voltage systems such as: the high voltage battery connections and conditioning, high voltage management and analytics, battery diagnostics, motor/generator insulation testing, interlock circuits & vehicle auxiliary systems involved in hybrid vehicle design.

Course Objectives:

- ⚡ Recognize the Personal Protection Equipment needed and understand the correct procedures and applications
- ⚡ Identify different hybrid system platforms along with their components and functions
- ⚡ Understand proper vehicle shutdown and High Voltage disabling procedures
- ⚡ Execute the proper hybrid vehicle diagnostics
- ⚡ Evaluate high voltage battery technology and their components
- ⚡ Demonstrate high voltage component testing, removal, and replacement

Training Activities: Hands-on live vehicle testing, hands-on training aids & access to internal components.

Course Duration: 16 CEU

EV Technology

Suitable Audience: A & B Technicians, Shop Foreman, Shop Owners/Managers, Service Advisors, Parts Professionals & Educators.

Course Length: 24 hrs.

Course Description:

Safety will be discussed along with proper usage of Personal Protective Equipment (PPE) and specialty tools required for EV service. This course will cover the types of EV drive systems in use as well as their operation and service needs. Description and operation sections will include E/V drivetrain components, inverter/converter systems, motor types and design differences, air conditioning system designs, cooling systems for the components.

Course Objectives:

- ⚡ Recognize the Personal Protection Equipment needed and understand the correct procedures and applications.
- ⚡ Learn about how the low voltage system interacts with the high voltage systems.
- ⚡ Learn about how high voltage systems operate. This will include a deep dive on inverters, battery technology, 3 phase motors and more.
- ⚡ Learn how to quickly and effectively diagnose no starts and other concerns with EVs.
- ⚡ Learn about charging infrastructure, on board chargers, charging cables, and more.
- ⚡ Learn about the differences in electrified air conditioning systems.

Training Activities: Hands-On Live vehicle, Hands-On Training aids, STEM Aids & Access to System Components.

Course Duration: 24 CEU

POPULAR THREE DAY TRAINING COURSES!

Two great courses combined!

Electrical Diagnostic Strategies

Suitable Audience: A, B Technicians, Shop Foreman/ Lead Technician, Educators.

Course Length: 16 hrs.

Course Description:

This intermediate course is focused on providing a deep knowledge in vehicle electrical circuits along with comprehensive testing of Battery, starting, charging. The participant will be presented with wiring diagrams to perform proper analysis of varied circuits controlled mechanically, conventionally and utilizing more modern logic program control (solid-state) components. The participants' comprehension of electricity, electrical circuits and their electrical skills will be combined and put to practice on provided vehicle-based training boards that simulate practical testing of all electrical systems utilizing live components and connections as they would find under the hood. Custom hands-on training aids will be used to perform practical electric testing with diagnostic outcomes in mind by building and diagnosing electrical circuits.

Course Objectives:

- ⚡ Gain confidence in how best to utilize your multimeter and all of its different functions.
- ⚡ Perform real world testing and learn what the results mean.
- ⚡ Understand the benefits of performing voltage drop testing versus open circuit resistance testing.
- ⚡ Become familiar with Ohm's Law.
- ⚡ Understand basic and more advanced electrical theories.
- ⚡ Recognize the Personal Protection Equipment needed and understand the correct procedures and applications.

Training Activities: Hands-On Training aids & Access to System Components.

Course Duration: 16 CEU

Lab Scope Usage

Suitable Audience: A & B Technicians, Shop Foreman/ Lead Technician, Owners/Managers & Educators.

Course Length: 8 hrs.

Course Description:

In this hands-on course, you will learn how to set your scope to capture the signals you will use to diagnose faults in today's cars. From gathering preliminary baseline signals to deep diagnostics with pressure waveform we will teach you the processes require to be successful with your scope. We encourage you to bring your lab scope to use in class. Learning how to diagnose with your tools is the best way to learn!

Course Objectives:

- ⚡ Gain confidence in how best to utilize your lab scope and all of its different functions.
- ⚡ Perform real world testing and learn what the results mean.
- ⚡ Learn about all the different systems you can test with your lab scope and what good waveforms look like compared to faulty ones.
- ⚡ Become familiar with pressure transducers and all of their applications.
- ⚡ Understand how and when to integrate lab scope usage into your diagnostic routines.

Training Activities: Hands-On Live vehicle & Hands-On Training aids.

Course Duration: 8 CEU

POPULAR THREE DAY TRAINING COURSES!

Heavy Duty Air Brake Workshop

Course Description:

Air brake systems can be frustrating, let our instructor show you how to conquer air brake concerns with this class-room friendly, hands-on course. Using our one-of-a kind air brake training aid system the participants will learn all the basics of connections, flow and control. Participants will be given the opportunity to build a fully functional air brake system right in class. This course will also shed light on “faulty” circuits to test, diagnose, evaluate and repair the issue once found onsite. Multiple faults and many diagnostic concepts will be covered so you’ll be ready for any air brake system repairs. ABS, trailer braking, and Trailer ABS systems will also be covered in depth discussing the importance of proper service and how it influences advanced systems like ABS and the newer stability and Advance Driver Assist Systems also known as ADAS.

Course Objectives:

- ⚡ Understand the operation of air-brake components
- ⚡ Communicate the operation of each component
- ⚡ Inspect a system for needed service
- ⚡ Knowledge of proper brake adjustments
- ⚡ Communicate how Auto and manual slack adjuster’s function
- ⚡ Relate how the components function
- ⚡ Relate how the componets function

Training Activities: Hands-On Training aids & Access to System Components.

Course Duration: 24 CEU

Advance Networking Diagnostics

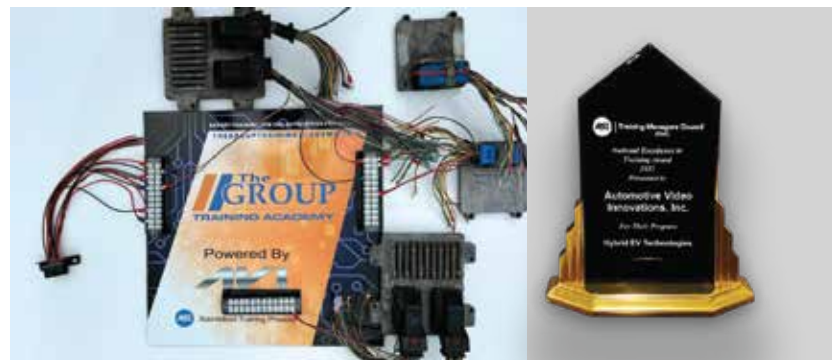
Effectively diagnosing C.A.N. and C.A.N. FD concerns poses a significant challenge. This intensive, hands-on course delivers unparalleled coverage of the design, operation, and testing of C.A.N. FD systems using AVI’s exclusive Networking Training Aid. Guided by expert instructors, AVI’s Advanced Networking Diagnostics Workshop provides the skills and solutions needed to diagnose network communication issues efficiently and accurately.

Course Objectives:

- ⚡ Decode C.A.N. Communications
- ⚡ Analyze Transceiver Operation
- ⚡ Interpret LIN Mapping
- ⚡ Understand automotive Ethernet Protocols
- ⚡ Compare and contrast the functions of STAR and Loop Configurations in Modern Network Systems
- ⚡ Properly Repair Twisted Pair Wiring
- ⚡ Interpret C.A.N. Labscope Waveforms

Training Activities: Hands-On Can Training Boards Training aid & Access to System Components.

Course Duration: 24 CEU



POPULAR TWO OR THREE DAY TRAINING COURSES!

Electrical Fundamentals with Electrical Training Boards

Course Description:

This session provides entry-level technicians with the core skills needed to develop into confident, skilled A-level technicians. Practical, hands-on training is performed on Electrical Training Boards (ETB), reinforcing classroom concepts through real-world testing exercises. All participants will gain valuable experience using electrical testing equipment and procedures.

Course Objectives:

- ⚡ Gain confidence using a multimeter and its functions
- ⚡ Perform real-world testing and interpret results accurately
- ⚡ Understand the benefits of voltage drop testing versus resistance testing
- ⚡ Apply Ohm's Law and basic electrical theory
- ⚡ Identify and use proper Personal Protective Equipment (PPE) safely

Training Activities: Hands-on exercises using Electrical Training Boards (ETB)

Course Duration: 24 - 36 CEU

Electrical Diagnostic Strategies

For technicians with a solid understanding of basic electrical concepts and principles, this intermediate-level course takes diagnostic skills to the next level. Building on foundational training, this 8–16 hour course explores advanced diagnostic strategies used to identify and repair complex electrical issues in modern vehicles. Participants will apply proven testing methods, analyze circuit behavior, and interpret real-world data using meters, scopes, and scan tools. This structured approach to diagnostics helps technicians reduce guesswork, improve accuracy, and gain confidence when dealing with intermittent or network-related electrical faults.

Course Objectives:

- ⚡ Review key electrical principles and their real-world applications
- ⚡ Analyze complex circuits to identify voltage drops, shorts, and open circuits
- ⚡ Use multimeters, test lights, and lab scopes for accurate diagnostics
- ⚡ Interpret wiring diagrams and connector pinouts efficiently
- ⚡ Apply systematic diagnostic processes to isolate faults
- ⚡ Understand control modules and network communication in electrical systems

Training Activities: Hands-on exercises using Electrical Training Boards (ETB)

Course duration: 8-16 CEU

LIVE TRAINING



POPULAR TWO-DAY TRAINING COURSE

Air Conditioning Service Featuring AVI's Award-Winning Chillinator

Hands-On HVAC Training for Modern Technicians

This two-day, hands-on training demonstrates the fundamentals of thermal-related vehicle systems and provides practical tips for the working technician who wants to master heating and air conditioning systems. HVAC technology is rapidly evolving, and this course bridges the gap between traditional service knowledge and the latest diagnostic procedures.

Participants will gain **hands-on experience** with both **conventional and hybrid/electric HVAC systems**, learning how to navigate the operation, diagnosis, and testing of today's sophisticated designs.

Course Highlights

- ⚡ Understand the **refrigeration cycle**, system components, and design variations
- ⚡ Diagnose and repair **R134a and R1234yf** systems
- ⚡ Perform **system leak testing** using multiple tools and methods
- ⚡ Practice **proper service, diagnostics, and testing techniques**
- ⚡ Operate using **the store's A/C machine** during class
- ⚡ Get hands-on exposure with **AVI's Award-Winning "Chillinator"**

The Chillinator Experience

The Chillinator training aid brings modern HVAC systems to life with its real-world functionality and transparent design. This award-winning tool includes all major components found in hybrid and EV A/C systems— **a 3-phase electric compressor, built-in inverter, 12-volt battery, thermal expansion valve, receiver-drier, blower motor, and accessible charge ports**—all integrated for clear visibility and practical demonstration.

Participants will explore diagnostics, electrical operation, and service procedures through a live system designed to simulate both conventional and electric/hybrid vehicle environments.

Bonus Training Opportunity:

Hybrid & EV Air Conditioning Service

Expand your training with this advanced module covering the design, operation, and testing of air conditioning systems specifically engineered for hybrid and electric vehicles. This turnkey program delivers a comprehensive understanding of thermal management across the latest vehicle platforms.

Customize your training by adding an additional day of training.

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800-718-7246



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