

# Mechanics Local 701 Training Fund

Administrative & Training Center • 450 Gundersen Drive • Carol Stream, Illinois 60188  
www.local701training.com 708-588-7540



November 15, 2019

Member

Address

City, State, Zip

Due to the uncertainty of state imposed COVID-19 gathering restrictions and in the interest of the health and safety of Local 701 members and their families, the Mechanics Local 701 Training Fund will not provide in-person classes for laid off members of excavating and paving employers. In the alternative, the fund has contracted with AVI OnDemand to provide members with an opportunity to fulfill their continuing education requirement through on-line classes and courses.

Beginning Tuesday, December 1, 2020 and ending Sunday, January 31, 2021, members will, at their option, have 24/7 access to an extensive diesel technology training videos package for light, medium and heavy duty vehicles. Your email address (**member@emailaddress**) has been pre-registered with AVI OnDemand. Your password is **changeme**. Follow the included instruction sheet to login and get started.

The Mechanics Local 701 Training Fund requires a minimum of twelve (12) or more hours of video classes to qualify for continuing education credit for the 2020-2021 cycle. AVI OnDemand requires a minimum of eighty percent (80%) correct answers on the class final tests in order to pass and earn a certificate of completion.

If your contact information is incorrect or if have any questions regarding continuing education credit email Dan Donahue at [programdirector@local701training.org](mailto:programdirector@local701training.org) If you have any questions regarding access or navigating the AVIONDemand website, call 1-800-718-7246.

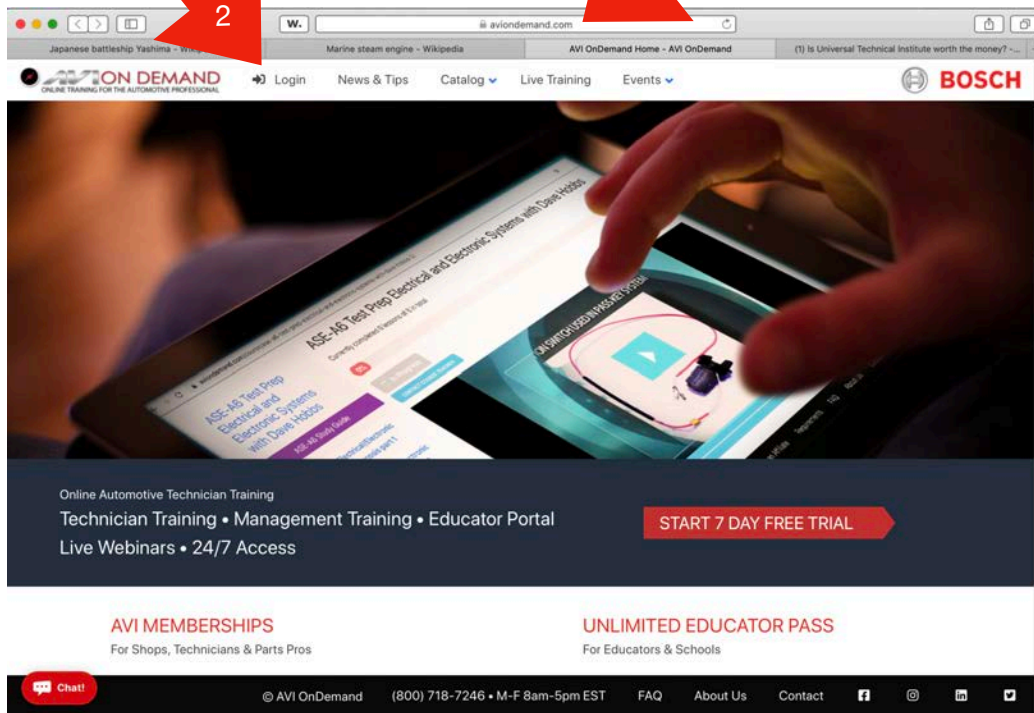
Dan Donahue

Program Director

Mechanics Local 701 Training Fund

click Login

go to aviondemand.com



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Password \*

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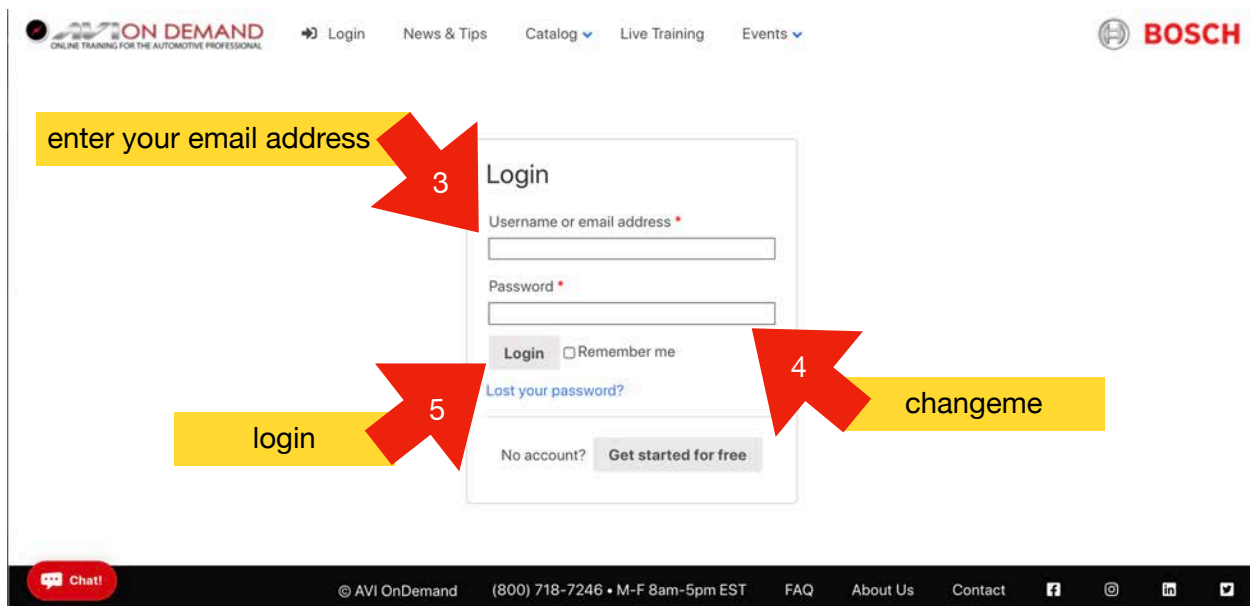
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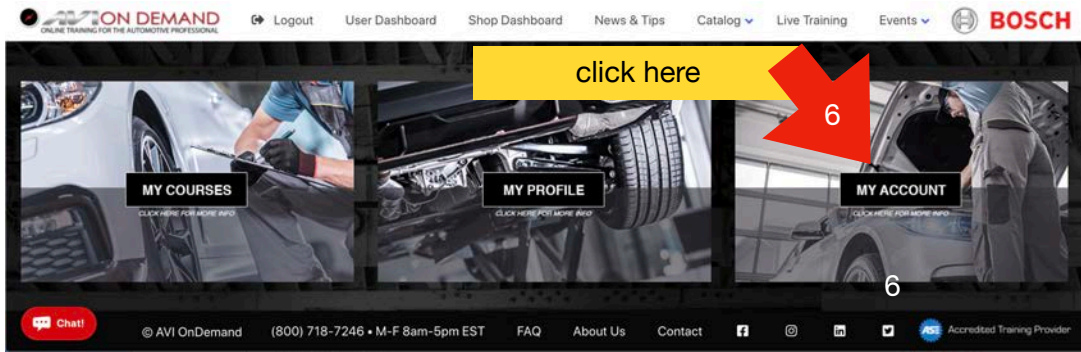
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changeme

login





Dashboard Membership Code Orders Subscriptions Downloads Addresses Payment methods **Account details** Logout

First name \* Last name \*

Email address \*

Password change

Current password (leave blank to leave unchanged)

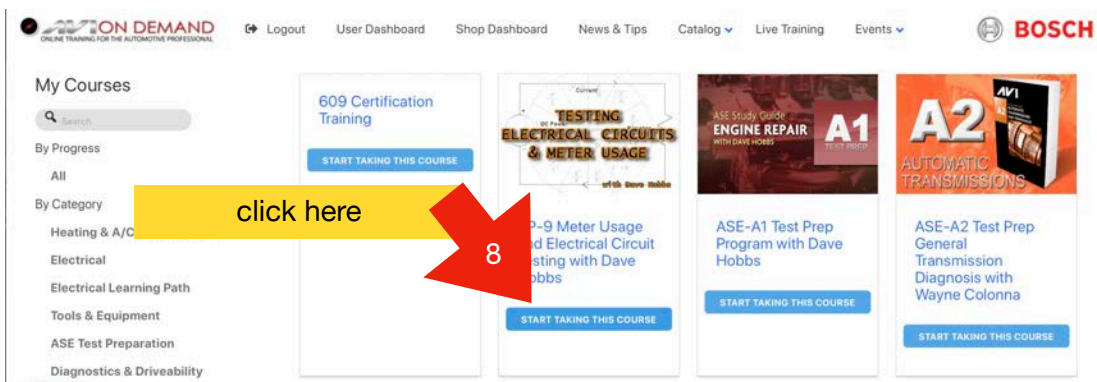
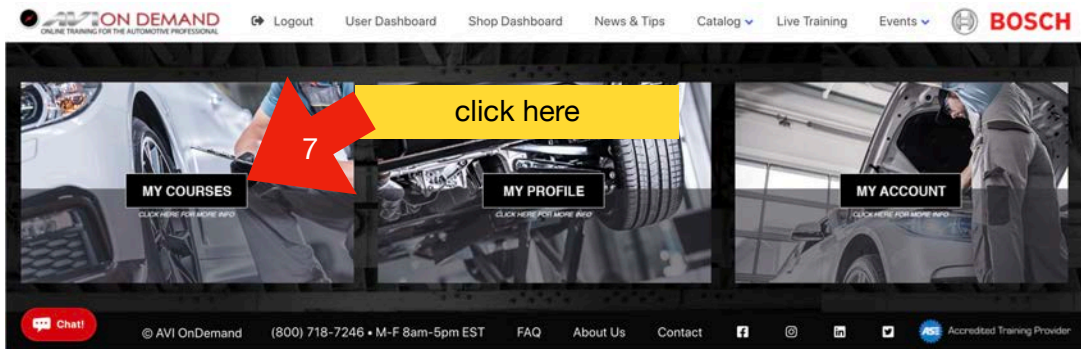
New password (leave blank to leave unchanged)

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# DIESEL TECHS

**WE HAVE YOU COVERED!**

Exclusive Diesel Training  
Available Online  
from **AVI OnDemand.**



Technical Training on Diagnostics, Performance  
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- ✓ *Time Saving Tips & Tricks*
- ✓ *Heavy, Medium & Light Duty Diesel Troubleshooting*
- ✓ *Electrical Testing*
- ✓ *Common Rail Diagnostics*
- ✓ *Injector Testing*
- ✓ *Misfire Diagnostics*
- ✓ *No-Start Diagnostics*
- ✓ *Exhaust After Treatment Systems*
- ✓ *ASE Test Prep*

Get the training you need to be the leader of the pack!  
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# Standard Diesel Bundle

## LBT-353 SMP Keeping It Cool – Extended

In this program, presented by Standard Motor Products director of Training Ryan Kooiman shows step-by-step procedures and a few tricks and tips to help technicians repair A/C systems right the first time. Several case studies are also featured.

## LBT-366 SMP Turbocharger Diagnosis and Service

Turbochargers are used in all light truck diesels have become common in small displacement engines. These systems change the diagnosis of fuel trim and engine breathing. Technician must understand turbocharger components and operation for proper diagnosis of engine performance complaints.

## LBT-367 SMP Going Beyond the Code

Engine performance problems typically set DTCs and technicians can fall into the trap of replacing parts based only on the code stored. Often, replacing parts based on DTCs alone does not solve the problem. Sometimes a vehicle can have symptoms but does not set a code.

## LBT-368 SMP Brain Teasers

How long has it been since you had “the car” that has been to several shops but is not fixed? Join us as we follow diagnostic techs as they tackle tough diagnostic scenarios. You will have an opportunity to diagnose them to see if you can arrive at the correct conclusion.

## LBT-381 Light Duty Diesel Problems and Solutions

Compared to the mid-90s, diesel vehicles have made a serious comeback. The increase in popularity is largely the result of a steady string of advancements and improvements to the diesel engine. New engine designs, noise- and vibration-damping technologies, and improvements like electronic engine control have spawned a new generation of engines.

## SMP-01 ABS and Vehicle Stability Control

ABS is the core element used for vehicle stability systems. New active wheel speed sensors combined with active control of braking and throttle controls have made vehicles much safer.

## SMP-02 Automotive HVAC Fundamentals

This class will show you what you need to know about how the components work together.

## SMP-03 Chevrolet Colorado Diesel Overview

Chevrolet has teamed up with Isuzu to bring yet another winning Duramax engine to their diesel offerings. Beginning in 2016, the new 2.8L Duramax has been available for the Chevrolet Colorado.

## SMP-04 Chrysler/Jeep Tips and Tricks

Chrysler and Jeep engine controls have undergone big changes and are now using a common engine control module design. You need good information to successfully diagnose driveability and emissions problems on these vehicles.

# Standard Diesel Bundle

## SMP-05 Electronic Transmission Control Diagnosis

In this class, we will cover diagnostic tips to help you decide if a driveability concern is caused by the engine or the transmission. We will use case studies to demonstrate additional failures.

## SMP-06 Electronic Transmission Fundamentals

Automatic transmissions are controlled by the engine control system and use many of the same inputs. Transmissions also contain integral sensors and control actuators. You might be surprised to know that you can fix many transmission complaints using the same techniques you use for driveability diagnosis.

## SMP-07 Gasoline Fuel Injection Fundamentals

In this class we will look at the evolution of fuel injection from throttle body to direct injection. We will demonstrate diagnosis and repair procedures using several case studies.

## SMP-08 Guerilla Diagnostics

Technicians are often faced with diagnostic dilemmas without the benefit of accurate service information, OE scan tools, and lab scopes.

## SMP-09 HVAC r1234yf Update

Many vehicles are being built with r1234yf refrigerant systems. You will need to upgrade your equipment and service practices to accommodate them. Are you ready for this AC season?

## SMP-10 Hyundai/Kia Tips and Tricks

These cars have some unique operation and diagnostic quirks which can lead you down the wrong path. This class will help you get ready to diagnose common problems and be profitable while doing it.

## SMP-11 Key Off Draw Diagnosis

In days gone by, a simple test light could be used to identify whether an excessive amperage draw on the battery was present. However, modern vehicles require more sophisticated testing and an understanding of the vehicle network and Power Moding.

## SMP-12 Light Truck Diesel Fundamentals

We will cover the different types of injectors and fuel delivery systems used on common engines. Proper installation techniques will be demonstrated.

## SMP-13 Misfire Diagnostic Fundamentals

This class will improve your misfire diagnostic skills.

## SMP-14 Modern Valve Actuation Systems

Valve actuation systems have undergone major changes in the last decade. Variable timing and variable lift are now common place and in some cases exist together on the same engine. Displacement-On-Demand systems have also been used on some engines to deactivate cylinders with special lifters and oil control.

## SMP-15 More Duramax Diesel Tips & Tricks

The Duramax engine has undergone a number of changes over the years and presents technicians with many service opportunities as well as diagnostic challenges.



# Standard Diesel Bundle

## SMP-16 More Electrical Puzzles

We will leverage service information and schematics, scan data, meters, and lab scopes to arrive at a diagnostic conclusion. You will have an opportunity to analyze the data and information to see if you have what it takes to solve these problems.

## SMP-17 Relay Testing and Diagnosis Fundamentals

Vehicles are full of relays. Some can be replaced separately and some are integrated in modules which must be replaced as an assembly. You need a fast and accurate method to diagnose them.

## SMP-18 Scan Data Diagnostics Fundamentals

The use of scan data for diagnosing vehicle faults with or without stored DTCs can be very powerful. What is often missing in training is how to leverage the information.

## SMP-19 Sensor Diagnostics

There are many types of sensors being used on vehicles today to measure pressure, temperature, position, and mass. This class will help you to understand how they work and to troubleshoot problems with them.

## SMP-20 Voltmeter Fundamentals

We all have a meter in our toolbox. Do you know how to use all the features? What's the best way to check a live circuit? How do you measure current? What is delta? The meter can do so much more than open circuit testing. In this class we will show you how to use your meter to test a variety of circuits and improve your ability to get the most from this powerful tool.

## SMP-21 6.0 Powerstroke Misfire Tips

This class will help you to develop a solid diagnostic procedure to find the root cause of 6.0L misfires.

## SMP-22 6.7 Cummins Tips and tricks

The 6.7L Cummins engine has been a popular engine choice for Dodge truck owners for a number of years now. This powerful L6 engine offers many service opportunities and is more easily serviced than other diesel engines.

## SMP-23 Affordable Labscope

Many technicians have realized the power that a lab scope can add to their diagnostic arsenal. However given the numerous other tools needed for their work, they are often unable to purchase an expensive lab scope for the occasional job that requires one.

## SMP-24 Basic Labscope Connection and Setup

In this class we will use a live demonstration to connect a scope to several common devices. We will then show you how to dial in to see the best picture of the signal.

## SMP-25 Diagnosing Catalytic Converter Efficiency

Many technicians dread dealing with catalytic converter codes such as the P0420 and P0430. Catalysts can be very expensive and there might be additional problems which could quickly damage them.

# Standard Diesel Bundle

## SMP-26 Diesel No Start Diagnostics

In this class we will develop a strategy for diagnosing both HEUI and common rail equipped engines when they don't start.

## SMP-27 GM Idle Stop and Light Hybrid

In order to meet fuel efficiency and emission mandates imposed by the federal government, GM has continued to expand their offering of light hybrid and idle stop vehicles.

## SMP-28 No Scope Diagnosis

Don't have a lab scope? Does this mean you cannot troubleshoot the tough problems? Perhaps you're not getting as much value from your scan tool and DMM as you could be.

## SMP-29 Voltage Drop Testing

Most vehicle manufacturers use unloaded circuit testing in their trouble charts which often lead to a misdiagnosis. This class will help you to understand voltage drop testing to diagnose component and wiring faults.

## SMP-30 Wiring Diagram Fundamentals

In this class, we will dissect diagrams and show you how to find important clues to problems and diagnose the car quickly.

## SMP-31 Vehicle Electronics Fundamentals Part 1: Defining Electronics

The goal of this training series is to prepare technicians to diagnose and repair vehicle electronic systems successfully. Each training segment will reinforce the concepts taught with exercises and a case study.

## SMP-32 Vehicle Electronics Fundamentals Part 2: Electrical Measurements

The goal of this training series is to prepare technicians to diagnose and repair vehicle electronic systems successfully. Each training segment will reinforce the concepts taught with exercises and a case study.

## SMP-33 Vehicle Electronics Fundamentals Part 3: Base Sensor Testing

The goal of this installment is for technicians to understand the basic construction and operation of the various simple sensor types found on vehicles.

## SMP-34 Vehicle Electronics Fundamentals Part 4: Complex Sensor Testing

Modern vehicles use many electronic controls. Diagnosing faults can be more difficult for technicians who have not had the benefit of training in electronics. This can lead to the replacement of unneeded parts, angry customers, and frustrated technicians.

## SMP-35 Vehicle Electronics Fundamentals Part 5 : Module Testing

The goal of this installment is for technicians to understand the basic elements of vehicle modules, what they need to operate, and how driver and reference circuits work.

## SMP-36 Vehicle Electronics Fundamentals Part 6: Reading Schematics

The goal of this installment is for technicians to be able to understand wiring schematics and to use them effectively when diagnosing faults.



# Standard Diesel Bundle

## SMP-37 Diagnose Vehicle Networks

The goal of this class is to prepare technicians to solve communications problems effectively on a variety of vehicles. Diagnostic scenarios will be presented with exercises and solutions.

## SMP-38 Automotive HVAC Passenger Compartment Controls

Each year there are changes to vehicle HVAC systems that require new service techniques and tools. Technicians must keep up with new technology or costly mistakes can be made. Class Highlights: Learn the latest information on new refrigerants, tools, and service issues.

## SMP-53 Charging Systems Diagnostics

Knowing how to diagnose a modern charging system is a fundamental skill required for automotive technicians. This class will explain the basic operation of the charging system and show case studies from real-world failures. The learning objectives for this class are: Describe the operating principles of the charging system Analyze scan tool.

## SMP-54 Getting the Most out of Your DVOM

The Digital Voltage/Ohm Meter (DVOM) is a fundamental tool required for basic electrical diagnostics. However, many advanced diagnostic scenarios can be handled using a DVOM if its many features are utilized. This class will teach how to get the most out of your DVOM.

## SMP-55 Late Model Hybrid Systems

Hybrid vehicles have been around for a number of years, but these vehicles still bring a lot of mystery to technicians. This class will teach you the basic operation of a hybrid vehicle. Real world case studies will be used show how to diagnose various hybrid faults.

## SMP-56 Rapid Sensor & Circuit Testing

There are many types of sensors being used on vehicles today to measure a variety of parameters. This class will show you operating principles, how they work, and how to troubleshoot problems with them.

## SMP-57 Tire Pressure Monitoring Systems (TPMS)

TPMS has been around for a number of years since its mandate in 2007 for most vehicles sold in the United States. However, even before the mandate, TPMS was available on many vehicles. This class will explore the operation of Indirect and Direct Tire Pressure Monitoring Systems and demonstrate diagnostics through real-world case studies.

## SMP-58 Voltage Drop Testing Techniques

Performing circuit tests on unloaded circuits can often lead to a misdiagnosis. This class will help you to understand voltage drop testing to diagnose component and wiring faults. The learning objectives for this class are: Interpret voltage measurements Formulate methods to load circuits for testing Demonstrate setting up a circuit for voltage drop testing

# Bosch Course Bundle

## [LBT-280 Bosch: The Essentials of TDI - 11 Lessons](#)

This program will enable the technician to properly identify, understand and diagnose the most common 1996 and newer VW and Audi passenger car diesel systems. All three designs will be reviewed; early VE-E, Unit Injector and Common Rail Diesel injection systems. The program will provide a comprehensive overview of diesel technology.

## [LS-10 Electronic Communication and Diagnostics for the Diesel Technician with Jim Wilson - 2 Lessons](#)

Heavy duty diagnostic capabilities have changed tremendously with increased data speed and the sheer quantity of information available to the technician. On-board diagnostic standards, similar to passenger cars, are being added to class 7 and class 8 trucks to provide greater access to diagnostic information for diesel technicians.

## [LS-28 Quick Strike Diesel No-Start Diagnostics - 2 Lessons](#)

You've heard the constant cranking of a late model diesel engine and lucky for you, it's not in your bay. Fuel quality, quantity and atomization need to be so precise there is little room for errors. The key to solving common rail diesel issues is having a solid game plan.

## [LS-3 Sprinter Diesel Diagnostics with Bob Pattengale - 2 Lessons](#)

Bob Pattengale, National Training Manager for Robert Bosch LLC will present a training class on Sprinter Diesel Diagnostics, focusing on common rail injection systems and the differences between the 2.7 and the 3.0 engines.

## [LS-42 Bosch Diesel Vehicle Diagnostics: Nissan Titan Diesel Overview - 11 Lessons](#)

The trend towards diesel powered vehicles continues with the introduction of the Nissan Titan pickup equipped with a Cummins 5.0L turbocharged engine and Bosch Common Rail Diesel (CRD) fuel system.

## [LS-45 Bosch Common Rail Diesel Diagnostics for European Vehicles - 10 Lessons](#)

European branded manufacturers were the first to introduce Common Rail Diesel (CRD) fuel systems on light-duty passenger car vehicles in the US. Audi, BMW, Mercedes and Volkswagen are the most common brands with a variety of vehicle and engine configurations.

## [CCP-006 Understanding Diesel Exhaust Fluid Systems - 1 Lesson](#)

Today's common rail diesel vehicles are equipped with after-treatment systems to reduce tailpipe emissions. Most of you have sold Diesel Exhaust Fluid (DEF) at some point in the past, but did not know how or why it is used.

## [LBT-329 Diesel Exhaust Aftertreatment Explained - 2 Lessons](#)

This HD streaming event, sponsored by Bosch will provide an in depth presentation on diesel after treatment system designs, system history, federal emission standards, plus theory and operation.

## [LS-49 Unlock the Power of Global OBD2 for European Vehicles - 2 Lessons](#)

The solution is fully understanding the power of Global OBD2 and this HD streaming event, sponsored by Bosch and presented by Jim Wilson, will provide the information needed to successfully use a Global OBD2 scan tool on European vehicles.

# Bosch Course Bundle

## [LS-60 Bosch The Mystery of Diesel Fuel Injectors - 2 Lessons](#)

This HD Streaming event, sponsored by Bosch, will provide a high level overview of Bosch Diesel fuel injectors and injection systems, with a focus on the various fuel delivery methods.

## [LBT-339 Bosch Sprinter Diesel Diagnostic Update - 2 Lessons](#)

This HD Streaming event, sponsored by Bosch, will provide a high level overview of 2010 and newer Sprinter fuel injection systems, with a focus on the various fuel delivery methods.

## [LBT-373 Bosch Why High Pressure Pumps Fail - 8 Lessons](#)

This program will give you the knowledge to understand what influences the high pressure to make high pressure. Test procedures beyond the manufactures steps.

## [LBT-380 Bosch Fiat Chrysler Automobiles \(FCA\) 3.0L V6 EcoDiesel - 21 Lessons](#)

Get a look into this powerful 3.0L EcoDiesel during this course.

# ASE T-Series Test Prep Course Bundle

[ASE-L2 Medium/Heavy Vehicle Electronic Diesel Engine Specialist](#)

[ASE-T1 Gasoline Engines](#)

[ASE-T2 Medium/Heavy Diesel Engines](#)

[ASE-T4 Medium/Heavy Duty Brakes](#)

[ASE-T5 Medium/Heavy Truck Suspension & Steering](#)

[ASE-T6 Medium Duty Heavy Duty Electrical and Electronic Systems](#)

[ASE-T7 Medium/Heavy Truck Service Heating and Air Conditioning](#)

[ASE-T8 Medium/Heavy Preventative Maintenance Inspection \(PMI\)](#)