GENUINE PARTS | ACDelco

Instructor-Led Training
Seminars
InShop Training
Virtual Training
Web-Based Training
Self Study Training
Video On Demand
Tech Tube Videos

SDTC2022

2022 ACDelco Training Course Catalog

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NOTES

ACDelco History

1900s

THE SPARK IGNITES

It began with William Durant and his United Motors Corporation, which acquired the dozens of smaller parts manufacturers, including Dayton Engineering Laboratories Company (DELCO). When General Motors came along, changing United Motors Corporation to United Motors Service and adding AC Spark Plug to the roster, only the sky was the limit.

1930s

QUEEN OF THE AIR

But there was more aviation history to be made, and we helped Amelia Earhart make it. The plane in which Earhart became the first woman pilot to fly solo across the Atlantic (in under 15 hours) featured AC spark plugs.

1950s

PEACETIME EXPANSION

Having helped secure a brighter future for all, we got to work building our own. United Motors Service branched out, and began providing sales, service and training for AC rebuilt fuel pumps, DELCO batteries, DELCO radio service parts, Saginaw recirculating-ball bumper jacks and more.

1970s

NEW FRONTIERS

We didn't stop there. Once man landed on the moon, he needed a way to explore it. So AC Spark Plug and DELCO (which General Motors united to form ACDelco), helped to create key components of the lunar rover vehicle used by Apollo 15 Astronauts.

1990s

SPEEDING AHEAD

Then we made the most of solid ground by hitting the track, with ACDelco sponsoring multiple drivers in leading motorsports events throughout the last decade of the millennium.

2010s

EYE ON THE FUTURE

And in 2016 we celebrated our 100th anniversary with a continued commitment to offering the latest in GM technological improvements and innovation as the true GM original Equipment parts brand.

1920s

LUCKY LINDY

Literally! When Charles Lindbergh set off in the Spirit of St. Louis to become the first person in history to be in New York one day and Paris the next, AC Spark Plug helped power the transatlantic journey that captured imaginations around the world.

1940s

BUILDING FOR VICTORY

The 1940s brought the challenging, threatening years of World War II, and both UMS and AC Spark Plug parts went to work for the Allied cause. We also took to the skies again, producing DELCO batteries for Navy planes.

1960s

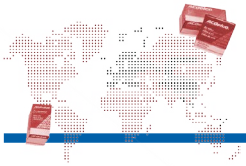
OUT OF THIS WORLD

But the space race was on, and we were proud parts of it. In fact, AC Spark Plug and Delco Electronics teams helped NASA develop the inertial guidance systems for the entire Apollo program that took the first Astronauts to the moon.

1980s

THE RIGHT FIT

Back on solid ground, we kept our minds on science. With field resources deployed to support the aftermarket, service engineers were brought into the engineering of GM vehicles to ensure that ACDelco parts fit exactly like true GM Original Equipment should.



2000s

A GLOBAL IMPACT

The new millennium brought new and exciting ways to connect; online commerce helped ACDelco expand its already extensive reach, with distribution across North America, Africa, and countries including Japan and India.

ACDelco Training Mission Statement

ACDelco's mission is to provide aftermarket service professionals with the skills necessary to help safely and effectively diagnose and repair customer vehicles utilizing inviting education methods within an extensive and engaging training portfolio.

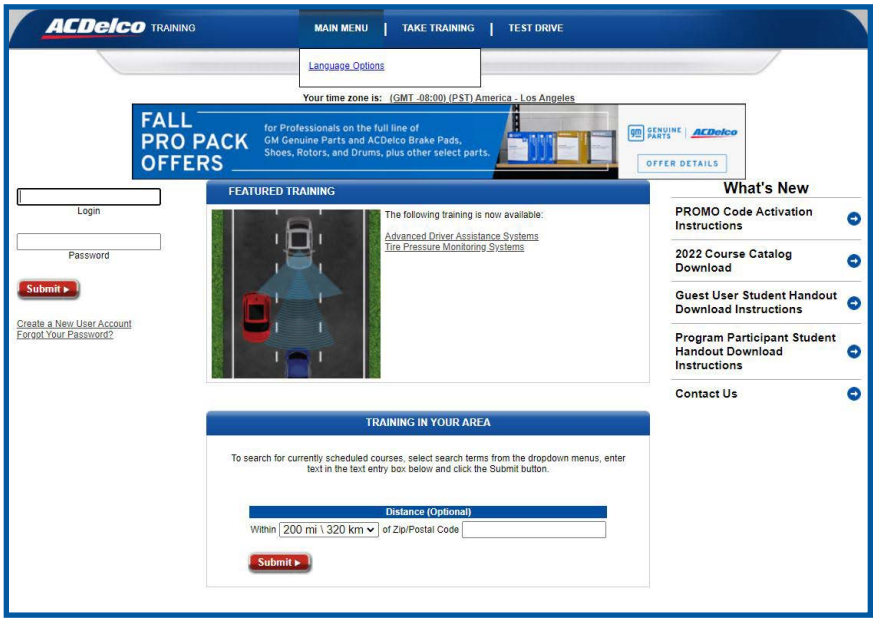
INTRODUCTION

Learning Management System

ACDelco's Learning Management System (LMS) offers single source access for training 24/7.

What is it?

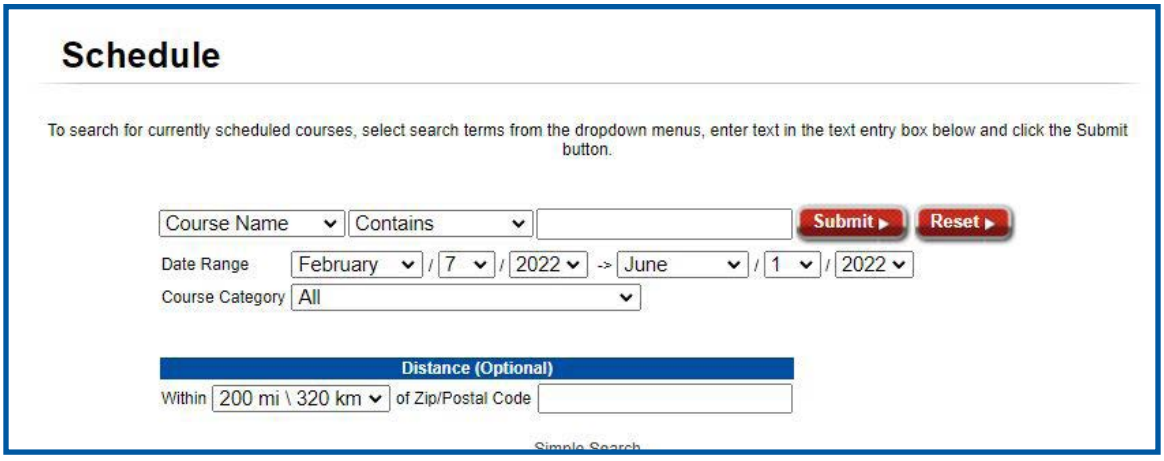
The ACDelco LMS delivers a global, single point of access for training for all personnel. The LMS is an easy-to-use, web-based application that streamlines the delivery and administration of the training program. Its many features reduce overall training costs and maximize employee time on the job.



What can it do?

- Offers a web-based, single point of access to training courses and student history
- Contains simple navigation that flattens the learning curve for Web-Based Training (WBT)
- Allows for scheduling and enrolling in Instructor-Led Training (ILT) events
- Permits access to comprehensive training materials
- Tracks learner progress
- Includes assessment / testing capabilities
- Ensures security of data

The ACDelco LMS enhances the ability to improve organizational skills and performance, without reducing employee productivity. The LMS provides the strong foundation needed for any learning program. Currently the LMS supports Web-Based Training (WBT), Instructor-Led Training (ILT), and streaming video.

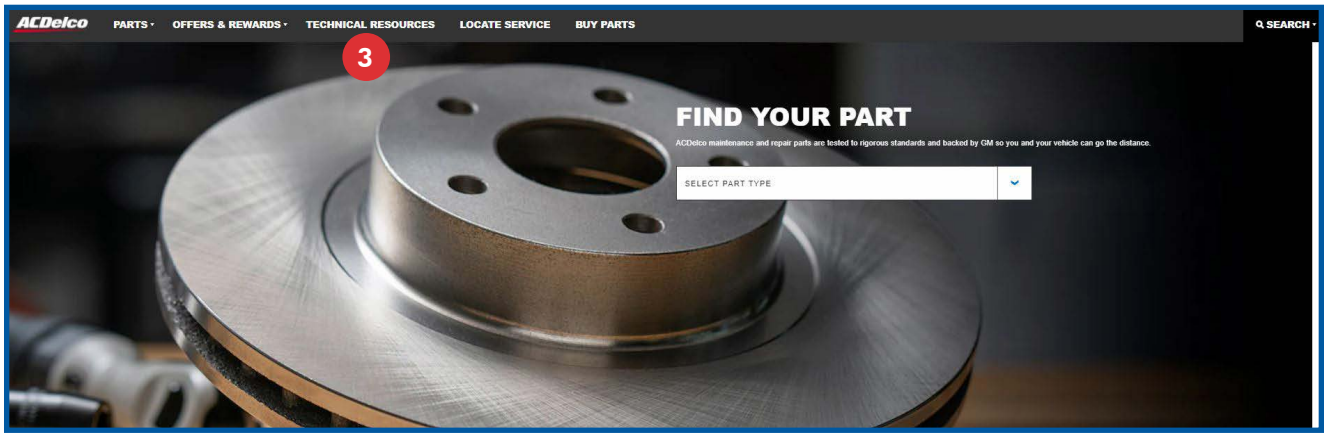


If you have any questions or would like any additional information, contact your ACDelco Representative or the Help Desk at (800) 825-5886, prompt 3.

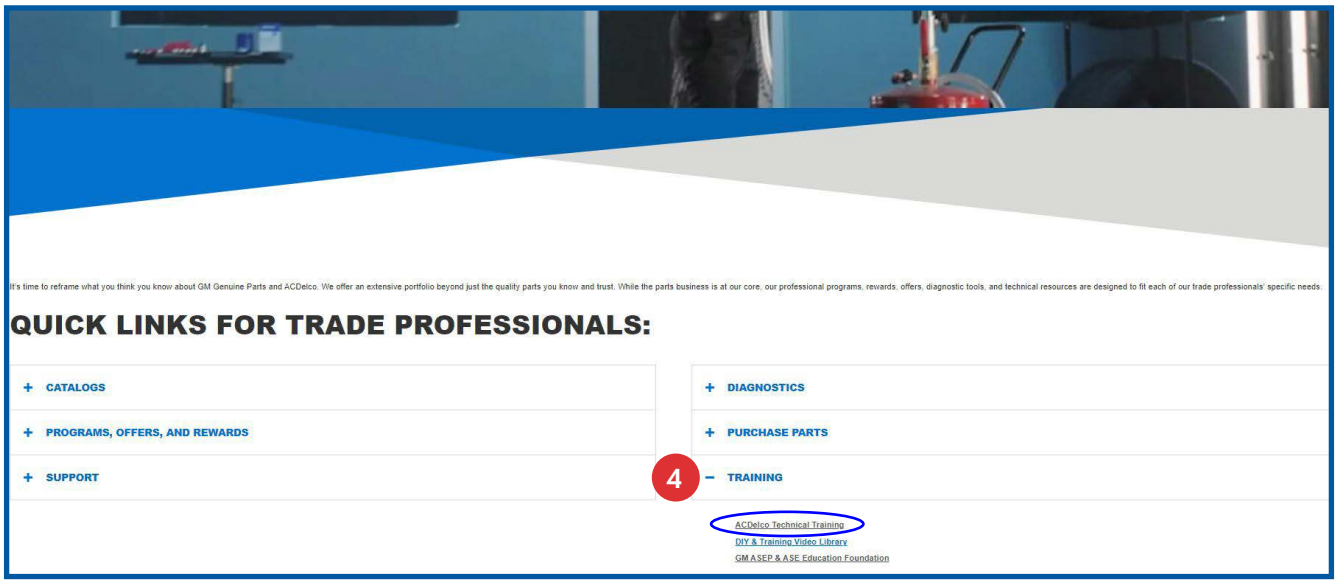
Access the ACDelco LMS:

1. Open your Internet browser.
2. Type the following into your address bar: acdelco.com
3. Click on the **Technical Resources** menu

> ***Tip:***
>
> *If your shop is an ACDelco program member, you must know your six-digit account number to register. If you don't know it, ask your manager or ACDelco rep.*

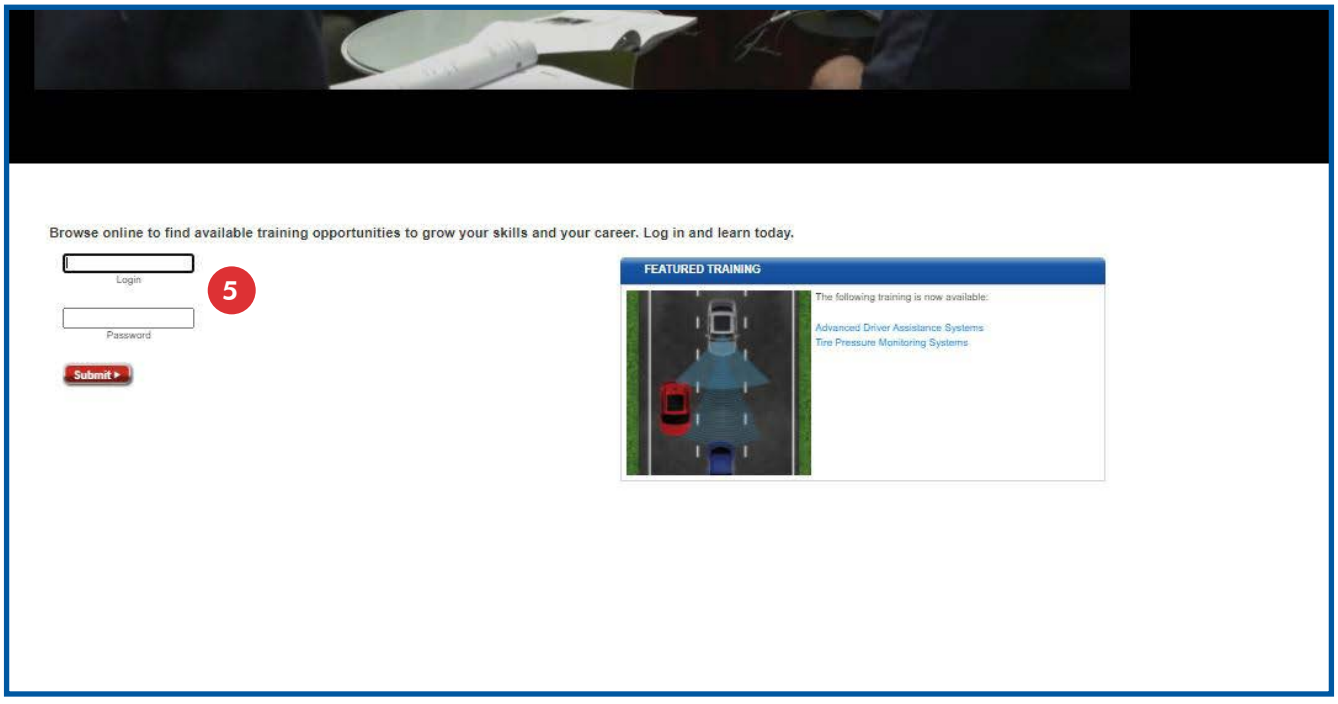


4. Scroll down to Quick Links For Trade Professionals and click on **Training**. Then click **ACDelco Technical Training**

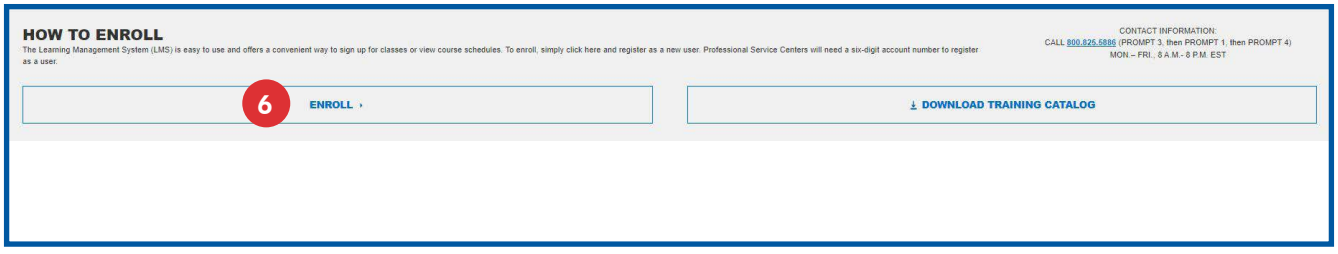


INTRODUCTION

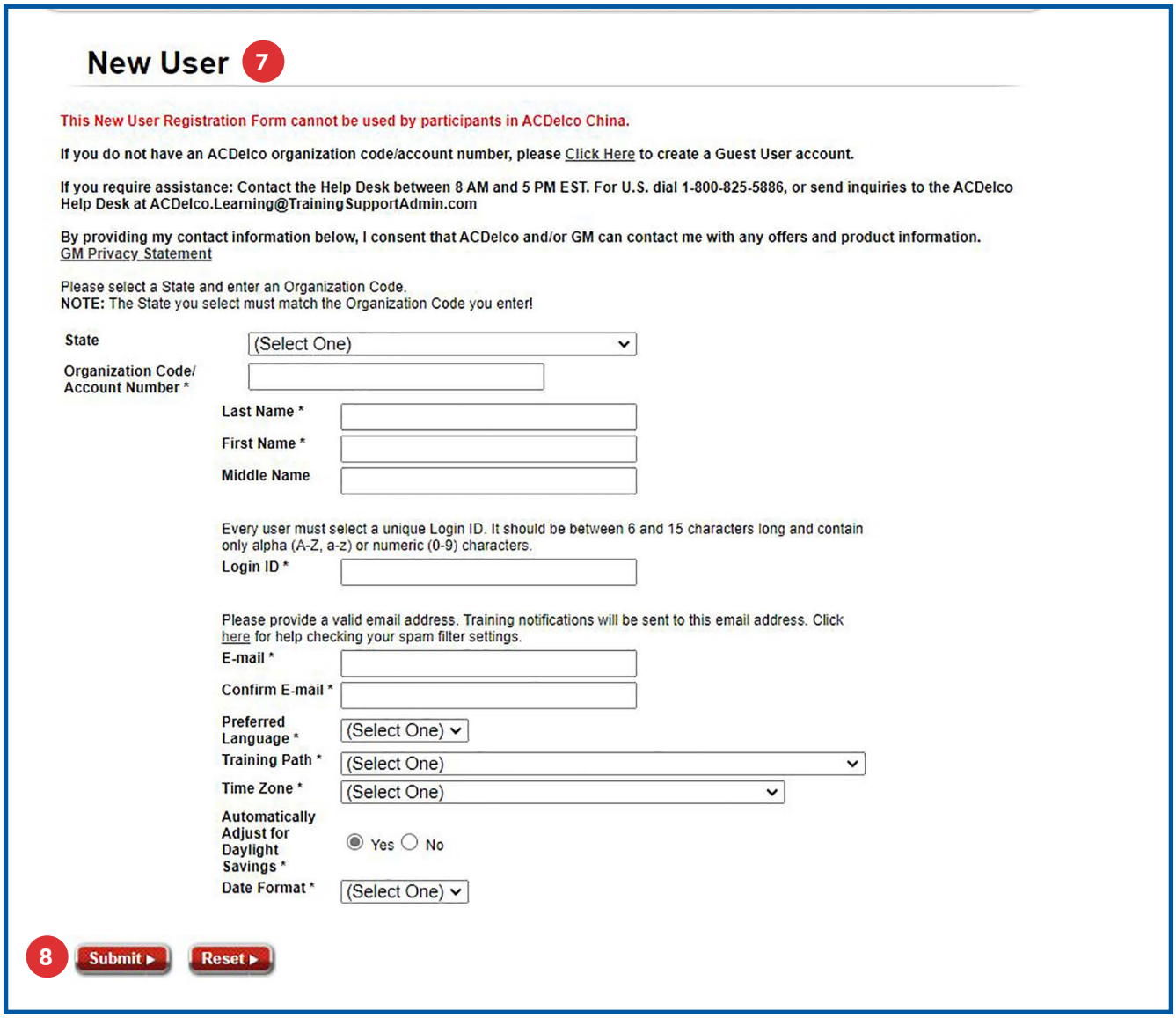
5. If you have an LMS log in you can log directly in to the LMS.



6. If you need to create a new user account, scroll down to How to Enroll and click the Enroll button.



7. Complete the New User form.



8. Click **Submit**

Tip:

After registering, you will be prompted to change your password right away. Remember to write down your log-in ID!

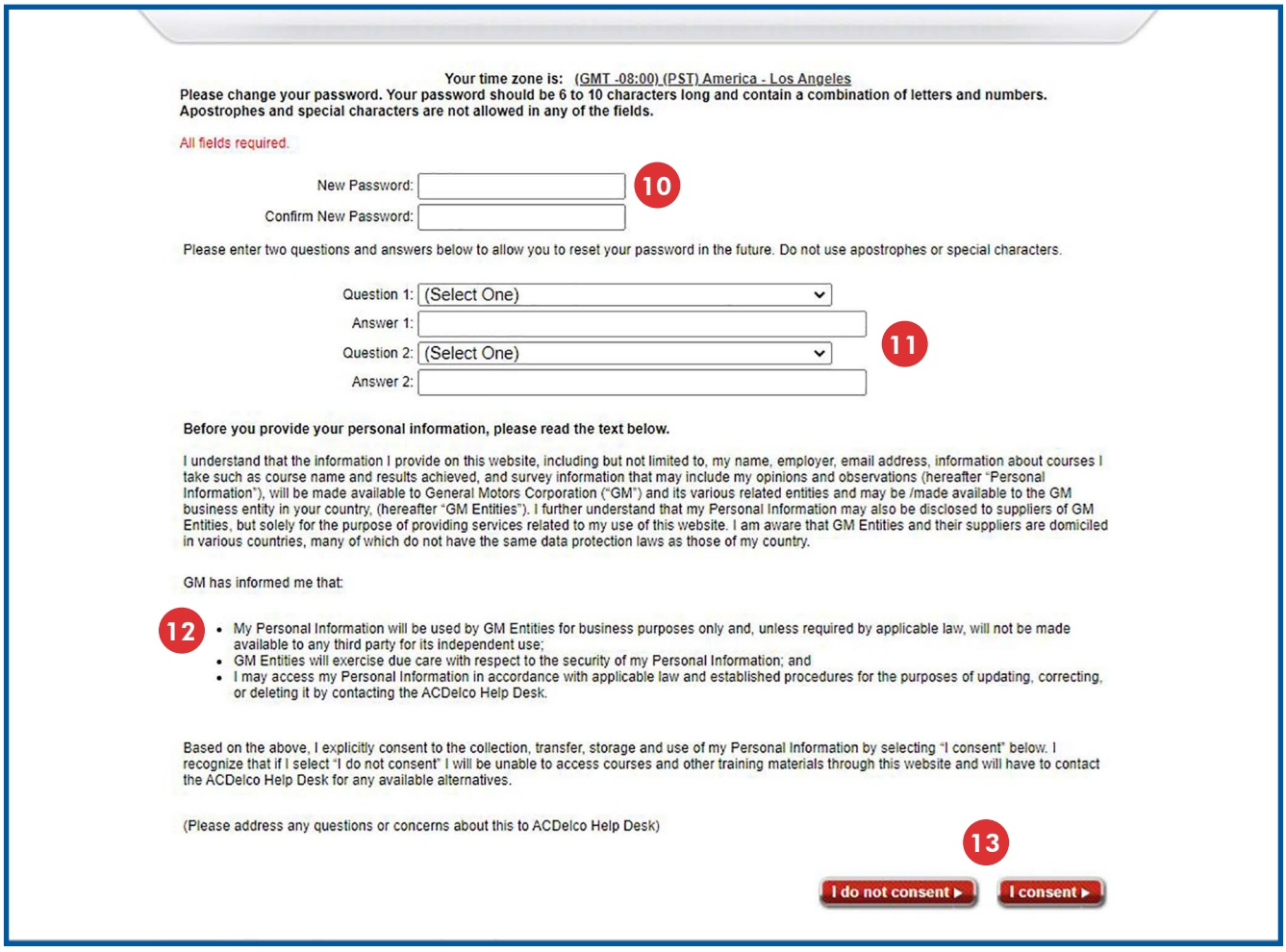
9. The system will generate a password for you, but you will be prompted to change it.

INTRODUCTION

10. Create a new password.
11. Select and answer 2 security questions.
12. Read the Personal Information statement.
13. Select I consent or I do not consent.

    Selecting I consent completes the User Application and automatically logs you in to the LMS.

    Selecting I do not consent will cancel the New User Account application.



ACDelco Training Approach

ACDelco's approach to training combines a variety of proven training delivery methods to ensure the maximum learning benefit for the service professional. In addition to traditional instructor-led technical training courses & seminars, a wide selection of online courses are also available. Online courses offer the latest available business & technical updates right at your fingertips.

ACDelco's training approach offers online courses 24/7 which allow participants to complete the courses at their own pace and on their own schedule. In addition, they precisely dovetail into hands on, Instructor-led Training courses.

Descriptions of the various delivery methods are detailed below.

Online Training

Each course is available to non-program participants for a nominal charge. Visit acdelcotraining.com or contact your ACDelco representative for more information.

SELF STUDY TRAINING courses are downloadable packets of technical information that can typically be reviewed in less than one hour. These guides are intended to help participants understand the technical aspect of various vehicle systems. Participants have the option to complete a test once material has been reviewed to receive credit for the course.

WEB-BASED TRAINING courses range from 1-2 hours in length. Content is presented through voiceover narration, on-screen text, graphics, animations and videos. Technicians are tested on their progress frequently by completing activities and tests.

VIDEO ON DEMAND courses offer technicians the ability to view previously recorded content at any time. These videos are searchable, include the ability to navigate through specific topics, and are now compatible with mobile phones and tablet devices.

TECHTUBE VIDEOS are short videos that focus on specific diagnostic procedures. Typically 3-7 minutes in length, these brief instructional videos offer a quick and convenient way to view various topics of instructional interest.

VIRTUAL SEMINARS are hosted by an ACDelco professional virtually via the Web. This format allows the same interactivity and participation as in-person events. Seminars are designed to keep technicians abreast of rapidly changing vehicle technology, product information and diagnostic tips on ACDelco's top product lines.

VIRTUAL INSHOP TRAINING sessions are shorter Virtual Seminars. These training events are hosted by an ACDelco professional virtually via the Web. This format allows the same interactivity and participation as in-person events. InShops are interactive and cover the specific issue or procedure live online.

Courseware pricing is dependent upon program participation. Contact your ACDelco representative or visit acdelco.com for more information.

INTRODUCTION

Face-to-Face Training

INSTRUCTOR-LED TRAINING courses are available in full-day (8 hour) sessions, and are facilitated by an ACDelco instructor. Training is presented utilizing vehicles, hands-on exercises and diagnostic situations. Registration for these courses can be accessed through the ACDelco Learning Management System (LMS).

SEMINARS are 3-hour sessions that are interactive and fast-paced and are presented by an ACDelco professional in a shop, distributor facility, or virtually online. Seminars are designed to keep technicians abreast of rapidly changing vehicle technology, product information and diagnostic tips on ACDelco's top product lines.

INSHOP TRAINING sessions are shorter Seminars, usually about an hour in duration and are available in-person or virtually online. During in-person InShop sessions, the ACDelco professional brings a live procedure or demonstration right into the service bay. InShop training sessions are designed for much smaller audiences - typically less than 10 technicians - and the format is more informal than a full Seminar.

Courseware pricing is dependent upon program participation. Contact your ACDelco representative or visit acdelco.com for more information.

ACDelco Training Course Numbering Methodology

Each ACDelco training course has a unique number. This number not only individually identifies each course for enrollment and credit tracking, but is combined with an alpha or numeric suffix to inventory all associated course materials.

Anatomy of a Course Code (Courses in 2018 and beyond)

Sample - SEM0101IL

Course Type –	Skill Area –	Sequential Course Number	– Version Number	– Media Type
S = Service	EM = Engine Mechanical		01 = 1st release	IL = Instructor-Led 8 Hour
B = Business	AT = Automatic Transmission		02 = 2nd release	IS = In-person InShop
	MT = Manual Transmission / Driveline		03 = 3rd release	VI = Virtual InShop
	SS = Suspension / Steering		04 = 4th release	SM = In-person Seminar
	BK = Brakes			VS = Virtual Seminar
	EL = Electrical / Electronic Systems			SL = Simulation
	AC = Heating & Air Conditioning			SF = Self Study
	EP = Engine Performance			TT = TechTube
	ST = Safety & Security			VO = Video on Demand
	DS = Diagnostic Systems			WB = Web-Based
	CC = Customer Communications			
	SC = Service Consultants			
	FM = Financial Management			
	PC = Parts Consultant			
	FN = Fundamentals			
	CL = Collision			
	DE = Diesel			
	AP = Alternative Propulsion			
	BE = Body Electrical			

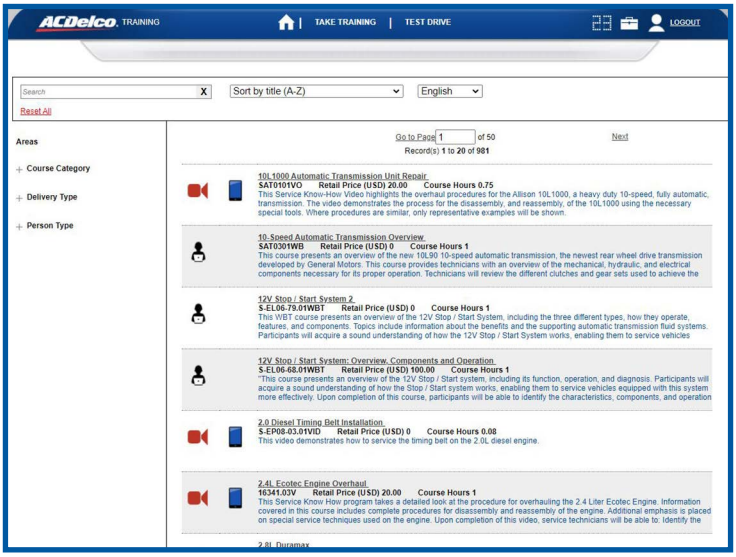
Anatomy of a Course Code (Courses prior to 2018)

Sample - S-EL06-07.01WBT

Course Type –	Skill Area –	Sequential Course Number	– Version Number	– Media Type
S = Service	FN00 = Fundamentals		01 = 1st release	ILT = Instructor-Led Training
B = Business	EM01 = Engine Mechanical		02 = 2nd release	IST = InShop Training
	AT02 = Automatic Transmission		03 = 3rd release	SEM = Seminar
	MT03 = Manual Transmission / Driveline		04 = 4th release	SIM = Simulation
	SS04 = Suspension / Steering			SST = Self Study Training
	BK05 = Brakes			TAS = TECHAssist
	EL06 = Electrical / Electronic Systems			VID = TechTube Video
	AC07 = Heating & Air Conditioning			V or D = Video on Demand
	EP08 = Engine Performance			WBT = Web-Based Training
	ST10 = Safety & Security			
	DS11 = Diagnostic Systems			
	CC30 = Customer Communications			
	CC60 = Marketing			
	SC31 = Service Consultants			
	FM32 = Financial Management			
	PC33 = Parts Consultant			
	FC02 = Fuel Control			

Searching for Courses

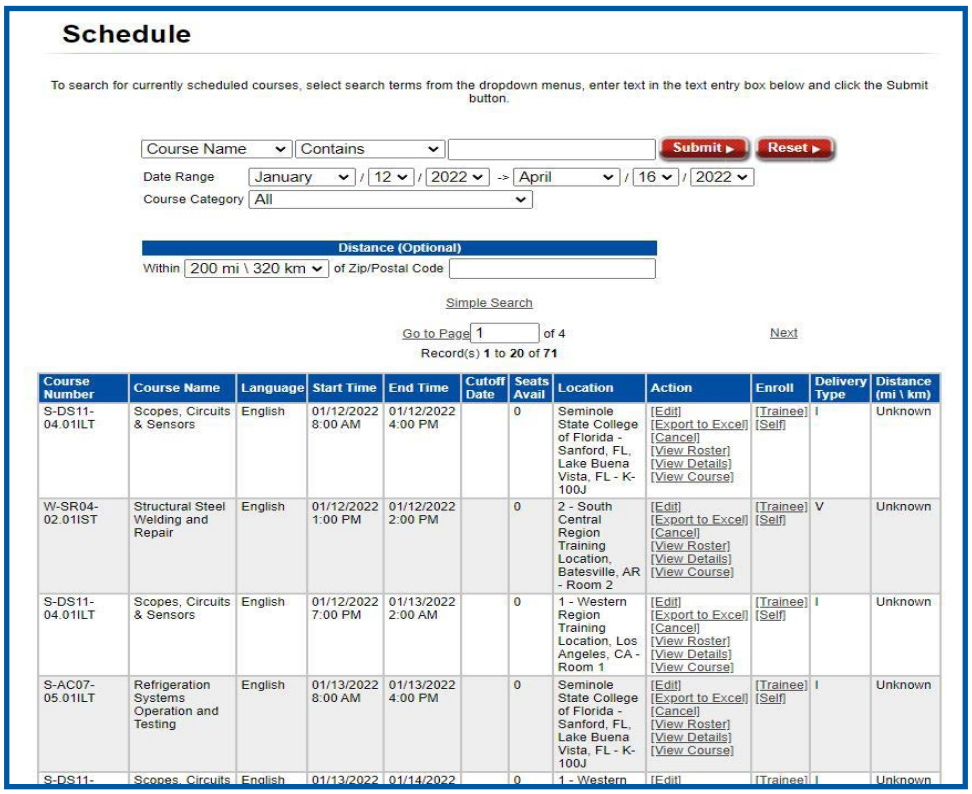
To search for courses, click on the **TAKE TRAINING** menu, and then **Catalog > Catalog Search**. Use the menu on the left to search for courses by Category, Delivery Type, or Person Type.



To search live courses in your area, click on the **TAKE TRAINING** menu, and then **Schedule > Search Course Sessions**. Enter your search criteria and click Submit.

If you are not a current user or need help with your user ID and password, contact the Help Desk between 8:00 a.m. and 5:00 p.m. (EST) at 1-800-825-5886, prompt 3. You will need your organization's six-digit account number available to register as a user.

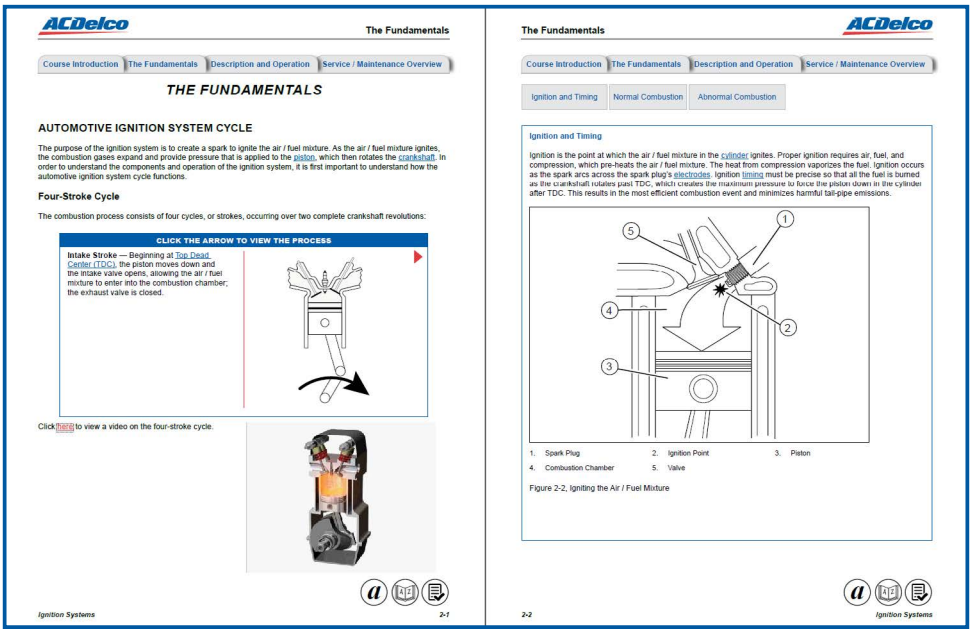
My User ID: _____ My Password: _____



Course Number	Course Name	Language	Start Time	End Time	Cutoff Date	Seats Avail	Location	Action	Enroll	Delivery Type	Distance (mi \ km)
S-DS11-04.01ILT	Scopes, Circuits & Sensors	English	01/12/2022 8:00 AM	01/12/2022 4:00 PM		0	Seminole State College of Florida - Sanford, FL, Lake Buena Vista, FL - K-100J	[Edit] [Export to Excel] [Cancel] [View Roster] [View Details] [View Course]	[Trainee] [Self]	I	Unknown
W-SR04-02.01IST	Structural Steel Welding and Repair	English	01/12/2022 1:00 PM	01/12/2022 2:00 PM		0	2 - South Central Region Training Location, Batesville, AR - Room 2	[Edit] [Export to Excel] [Cancel] [View Roster] [View Details] [View Course]	[Trainee] [Self]	V	Unknown
S-DS11-04.01ILT	Scopes, Circuits & Sensors	English	01/12/2022 7:00 PM	01/13/2022 2:00 AM		0	1 - Western Region Training Location, Los Angeles, CA - Room 1	[Edit] [Export to Excel] [Cancel] [View Roster] [View Details] [View Course]	[Trainee] [Self]	I	Unknown
S-AC07-05.01ILT	Refrigeration Systems Operation and Testing	English	01/13/2022 8:00 AM	01/13/2022 4:00 PM		0	Seminole State College of Florida - Sanford, FL, Lake Buena Vista, FL - K-100J	[Edit] [Export to Excel] [Cancel] [View Roster] [View Details] [View Course]	[Trainee] [Self]	I	Unknown
S-DS11-	Scopes, Circuits	English	01/13/2022	01/14/2022		0	1 - Western	[Edit]	[Trainee]	I	Unknown

Self Study Training

Self Study Training courses are downloadable packets of technical information that can typically be reviewed in less than one hour. These guides are intended to help participants understand the technical aspect of various vehicle systems. After reviewing the information, participants may receive credit for the course by completing a test.



Web-Based Training

Web-Based Training courses are typically 1-2 hours in length. Content is presented through voiceover narration, on-screen text, graphics, animations and videos. Technicians are tested on their progress frequently by completing activities and tests.

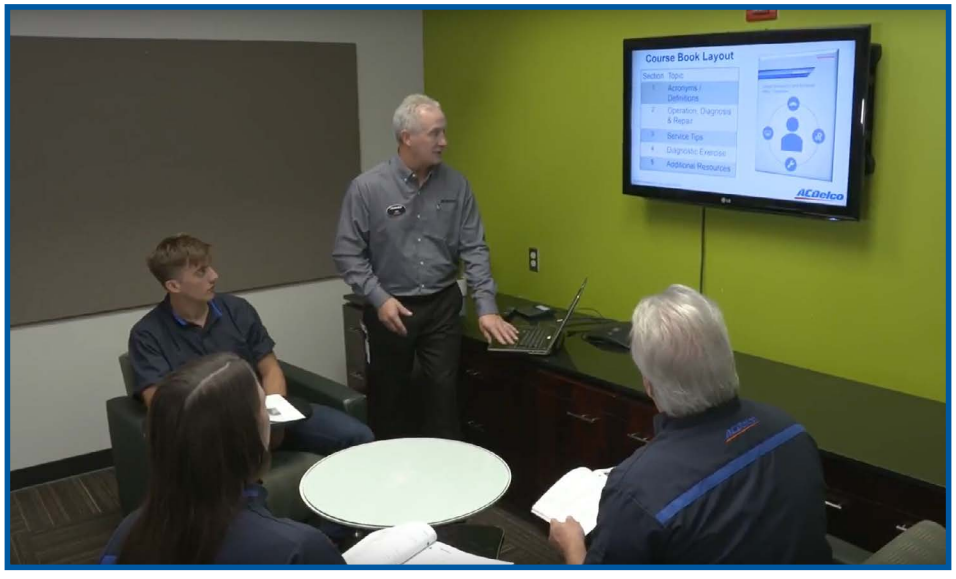
INTRODUCTION

Instructor-Led Training

Instructor-Led Training courses are full-day (8 hour) hands-on sessions that are facilitated by an ACDelco Instructor at a dedicated training center. Training is presented utilizing vehicles, hands-on exercises and diagnostic situations, providing technicians the opportunity to apply service and diagnostic skills to real concerns on actual vehicles. Enroll in a course today by accessing the schedule search feature at acdelcotraining.com.

Seminar

Seminars are typically three hours in length and are hosted by an ACDelco professional at a shop, distributor facility, or virtually online. Seminars cover the latest and greatest vehicle technologies to keep technicians abreast of this ever-evolving industry. For the convenience of technicians and shop owners, seminars are typically conducted in the evening.



Video on Demand

Video on Demand (VOD) allows technicians to review previously recorded content on the Learning Management System (LMS) at any time. VOD courses include component specific overviews and service information. VOD courses also include monthly Service Know How Emerging Issues broadcasts from 2012 to current. This series of monthly broadcasts is designed to keep the service technicians up-to-date on current issues. During each 60-minute session, current GM service bulletins and warranty issues will be highlighted for technical awareness. Each session will feature a major service topic, supported by GM engineering and service experts. Regular segments include:

- Top Stories
- Featured Topic
- What's Hot for Cars
- What's Hot for Trucks
- Powertrain
- Back to Basics
- Fix it Right the First Time

TechTube Videos

ACDelco TechTube videos are short, vignette-style videos (typically 3-7 minutes) that are focused on specific technical procedures. These brief instructional videos offer a quick and convenient way to view various topics of instructional interest and value. Browse for videos today by accessing the training catalog on acdelcotraining.com.

TechTubes are also tablet and smart phone compatible!

INTRODUCTION

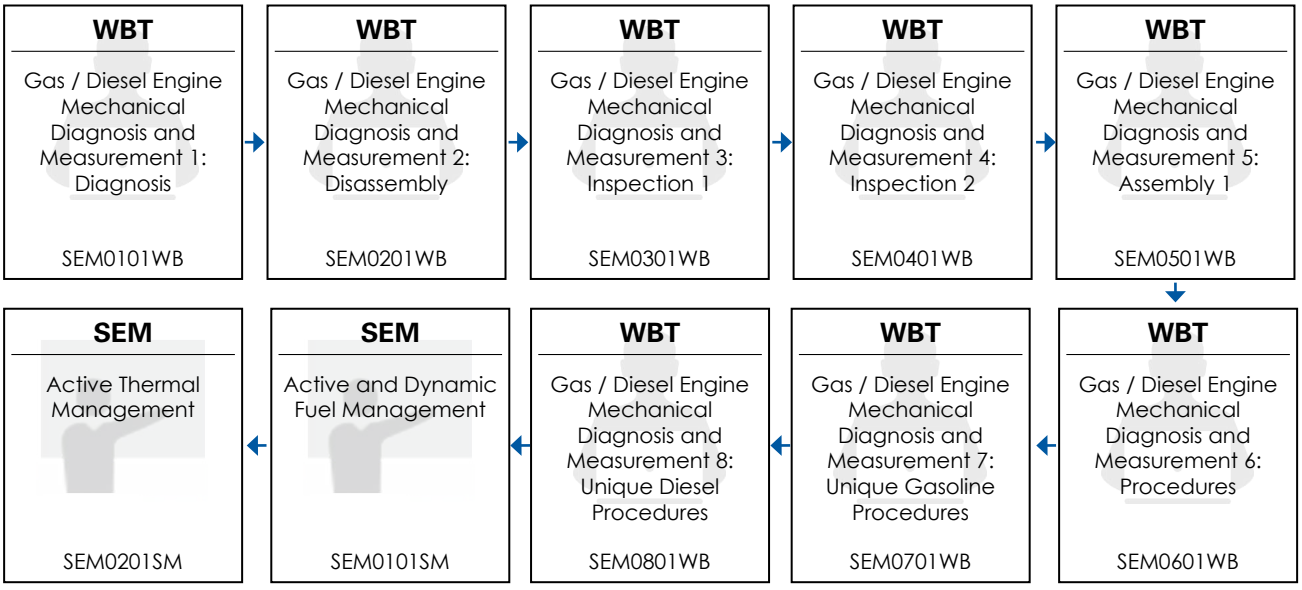
InShops

InShops are one hour sessions that are available in-person or virtually online. During an in-person InShop, an ACDelco professional brings training into your service bay. The training may be targeted to a specific repair issue or procedure for the technicians at that shop. Virtual InShops are interactive and cover the specific issue or procedure live online.

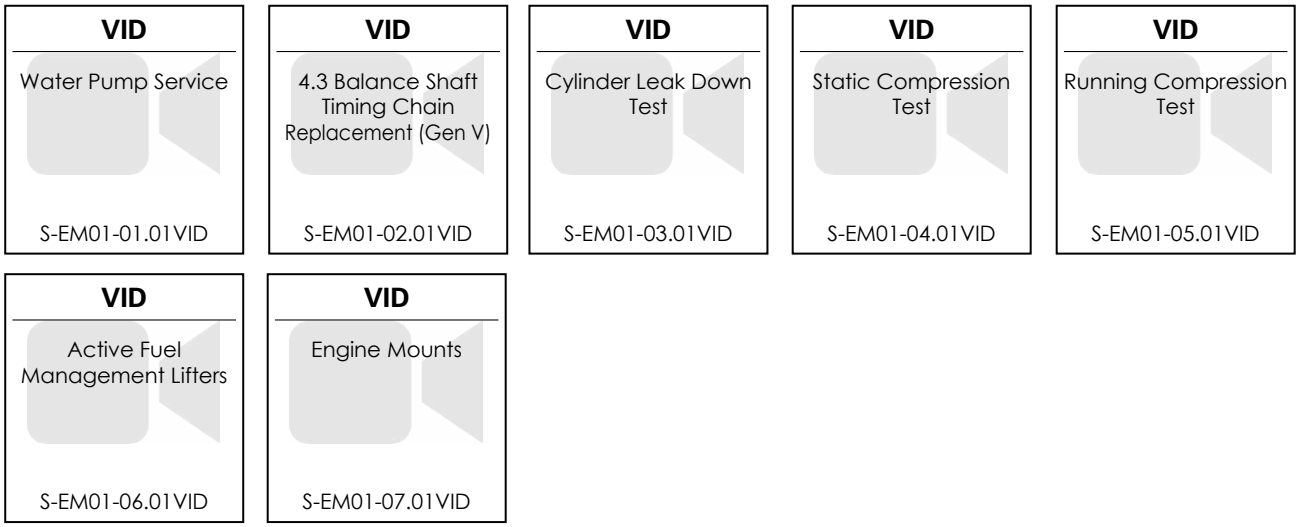
A1: ENGINE MECHANICAL

A recommended path for completing the Engine Mechanical curriculum is outlined below. To complete the training below and to search for and complete additional training, visit acdelcotraining.com.

RECOMMENDED PATH



ADDITIONAL TRAINING



A1: ENGINE MECHANICAL

Web-Based Training

GAS / DIESEL ENGINE MECHANICAL DIAGNOSIS AND MEASUREMENT 1: DIAGNOSIS — SEM0101WB

This course covers the diagnostic process for lower and upper 3.6L LGX V6 engine concerns, including engine noises, misfire, oil pressure concerns, and external component noises. This course is intended for service technicians and covers the theory of 3.6L LGX engine diagnosis. Topics include proven diagnostic procedures, test equipment, and methods. Upon completion of this course, the participants will be able to recall how to diagnose lower engine noise, recall how to diagnose upper engine noise, recall how to diagnose engine misfire, and identify oil pressure concerns.

Languages: English/French

GAS / DIESEL ENGINE MECHANICAL DIAGNOSIS AND MEASUREMENT 2: DISASSEMBLY — SEM0201WB

This course is intended for service technicians and covers the principles and procedures of 3.6L LGX engine disassembly. This course covers the disassembly process for the upper and lower sections of the 3.6L LGX V6 engine. First, it will cover the disassembly of the upper section of the 3.6L LGX V6 engine, and then the disassembly of the lower section. Related content in this course includes proven diagnostic procedures, test equipment, and methods of disassembly. Upon completion of this course, the participants will be able to recall pre-disassembly procedures, recall how to disassemble the overhead cam and camshaft, and recall how to disassemble the engine block.

Languages: English/French

GAS / DIESEL ENGINE MECHANICAL DIAGNOSIS AND MEASUREMENT 3: INSPECTION 1 — SEM0301WB

This course is intended for service technicians and covers the principles and procedures of the 3.6L LGX engine post-disassembly inspection. It covers the inspection process for the upper and lower sections of the 3.6L LGX V6 engine. Related content in this course includes proven inspection procedures, test equipment, and methods of measurement. Upon completion of this course, the participants will be able to summarize how to inspect the disassembled 3.6L LGX engine, recall how to clean, inspect and measure the engine block and crankshaft, recall how to disassemble, clean and inspect piston and rod assemblies, and recall how to clean and inspect the flexplate and balancer.

Languages: English/French

GAS / DIESEL ENGINE MECHANICAL DIAGNOSIS AND MEASUREMENT 4: INSPECTION 2 — SEM0401WB

This course is intended for service technicians and covers the principles and procedures of the 3.6L LGX engine post-disassembly inspection. It covers the second part of the inspection process, concentrating on the upper components of the 3.6L LGX V6 engine. Related content in this course includes proven inspection procedures, test equipment, and methods of measurement. Upon completion of this course, the participants will be able to: describe how to inspect the upper components of the disassembled 3.6L LGX engine, recall how to clean and inspect the fuel injector rails and injectors, recall how to clean, inspect, measure, and reassemble the camshaft/timing gear, valve lifters, and valve rocker arms, recall how to disassemble, clean, inspect, and assemble engine front cover, camshaft covers/carriers, and intake manifold, recall how to repair cylinder block bolt holes.

Languages: English/French

GAS / DIESEL ENGINE MECHANICAL DIAGNOSIS AND MEASUREMENT 5: ASSEMBLY 1 — SEM0501WB

course includes proven inspection procedures, test equipment, and methods of measurement. Upon completion of this course, participants will be able to describe how to assemble the upper components of the disassembled 3.6L LGX engine, recall how to assemble the piston and rod assemblies, recall how to perform the alternate clearance checking procedure, recall how to install the rear main seal, recall how to install the oil pump, and recall how to install and properly torque the cylinder head assembly.

Languages: English/French

GAS / DIESEL ENGINE MECHANICAL DIAGNOSIS AND MEASUREMENT 6: PROCEDURES — SEM0601WB

This course is intended for service technicians and covers the second half of the principles and procedures used during 3.6L LGX engine reassembly. It covers specific parts of the engine assembly process, concentrating on the upper components of the 3.6L LGX V6 engine including the installation of the camshaft actuator, timing chain guide and tensioner, oil pump, camshaft sprockets, fuel pump, high pressure fuel rail crossover pipe, front cover, oil pan, water pump, camshaft cover, engine coolant thermostat housing, water outlet, intake manifold, and crankshaft balancer. Related content in this course includes proven inspection procedures, test equipment, and methods of measurement. Upon completion of this course, the participants will be able to recall the order of the steps taken to re-assemble the left side of the 3.6L LGX engine, recall the order of the steps taken to re-assemble the right side of the 3.6L LGX engine, recall the order of the steps taken for re-installation of 3.6L LGX engine components including: the oil pump, the crankshaft assembly, fuel pump, the high pressure fuel rail crossover pipe, the engine front cover, oil pan, water pump, camshaft cover, engine coolant thermostat housing, water outlet, intake manifold, and the crankshaft balancer.

Languages: English/French

GAS / DIESEL ENGINE MECHANICAL DIAGNOSIS AND MEASUREMENT 7: UNIQUE GASOLINE PROCEDURES — SEM0701WB

This course is intended for service technicians and covers unique principles and procedures of engine service. It covers the unique parts of the disassembly, inspection, and assembly processes, concentrating on procedures and tools used for unique models of gasoline engines. Upon completion of this course, the participants will be able to: recall unique service procedures for Cylinder Set Strategy (CSS) gasoline engines, recall unique service procedures for various small and midsize gasoline engines, and recall unique service procedures used for 4.3L LV3 gasoline engines.

Languages: English/French

GAS / DIESEL ENGINE MECHANICAL DIAGNOSIS AND MEASUREMENT 8: UNIQUE DIESEL PROCEDURES — SEM0801WB

This course is intended for service technicians and covers unique principles and procedures of engine service. It covers the unique parts of the disassembly, inspection, and assembly processes, concentrating on procedures and tools used for unique models of diesel engines. Upon completion of this course, the participants will be able to: recall unique service procedures for the 6.6L Duramax diesel engine, recall unique service procedures used for the 2.8L LWN diesel engine, recall unique service procedures used for the 2.0L LUZ diesel engine, and recall unique service procedures used for the 1.6L LH7 diesel engine.

Languages: English/French

Seminar

ACTIVE AND DYNAMIC FUEL MANAGEMENT — SEM0101SM (IN-PERSON) SEM0101VS (VIRTUAL)

This Instructor-led Training Seminar focuses on the operation and diagnostic procedures of Active and Dynamic Fuel Management Systems. Modern engines employ valve timing and lift adjustment strategies to improve fuel economy, power, and emissions. Course content includes function and operation of variable valve timing, valve lift and cylinder deactivation systems. Additionally, this course highlights procedures and protocol for proper vehicle repairs, diagnostic procedures, service tips, and special tools. Various Original Equipment Manufacturers (OEMs) will be highlighted.

Languages: English

ACTIVE THERMAL MANAGEMENT — SEM0201SM (IN-PERSON) SEM0201VS (VIRTUAL)

This Instructor-led training seminar provides an overview of Active Thermal Management (ATM) system designs, operation, and servicing. Diagnosing and servicing of ATM systems requires an understanding of how engine performance and fuel economy is improved through targeted engine cooling and heating distribution. Using multiple cooling system loops, electric water pumps, and rotary valves to direct heat to efficiently regulate engine temperature. This course covers ATM system components including integrated manifolds, flow control valves and temperature sensors. Diagnosis and service procedures using scan tools and special tools required for servicing ATM systems will be discussed.

Languages: English

A1: ENGINE MECHANICAL

InShop Training

ACTIVE AND DYNAMIC FUEL MANAGEMENT

SEM0101IS (IN-PERSON)
SEM0101VI (VIRTUAL)

This Instructor-led Training InShop focuses on the operation and diagnostic procedures of Active and Dynamic Fuel Management Systems. Modern engines employ valve timing and lift adjustment strategies to improve fuel economy, power, and emissions. Course content includes function and operation of variable valve timing, valve lift and cylinder deactivation systems. Various Original Equipment Manufacturers (OEMs) will be highlighted.

Languages: English

ACTIVE THERMAL MANAGEMENT

SEM0201IS (IN-PERSON)
SEM0201VI (VIRTUAL)

This Instructor-led training seminar provides an overview of Active Thermal Management (ATM) system designs, operation, and servicing. Diagnosing and servicing of ATM systems requires an understanding of how engine performance and fuel economy is improved through targeted engine cooling and heating distribution. Using multiple cooling system loops, electric water pumps, and rotary valves to direct heat to efficiently regulate engine temperature. This course covers ATM system components including integrated manifolds, flow control valves and temperature sensors. Diagnosis and service procedures using scan tools and special tools required for servicing ATM systems will be discussed.

Languages: English

TechTube Videos

WATER PUMP SERVICE

S-EM01-01.01VID

This service video will share some information on things to look for when replacing a water pump and servicing the coolant system to reduce repeat pump failures.

Languages: English

4.3 BALANCE SHAFT TIMING CHAIN REPLACEMENT (GEN V)

S-EM01-01.02VID

This video demonstrates how to replace the balancer shaft timing chain on a Gen V 4.3L engine.

Languages: English

CYLINDER LEAK DOWN TEST

S-EM01-01.03VID

This video demonstrates how to perform a cylinder leak down test to gauge the health of an engine, using a diagnostic scenario.

Languages: English

STATIC COMPRESSION TEST

S-EM01-01.04VID

This video demonstrates how to perform a static compression test and how the readings can help diagnose a base engine problem.

Languages: English

RUNNING COMPRESSION TEST

S-EM01-01.05VID

This video demonstrates how to perform a running compression test and how the readings can help diagnose a base engine problem.

Languages: English

ACTIVE FUEL MANAGEMENT LIFTERS

S-EM01-06.01VID

This video describes General Motors Active Fuel Management (AFM) system operation, diagnosis and inspection of AFM lifters and proper replacement procedures.

Languages: English

ENGINE MOUNTS

S-EM01-07.01VID

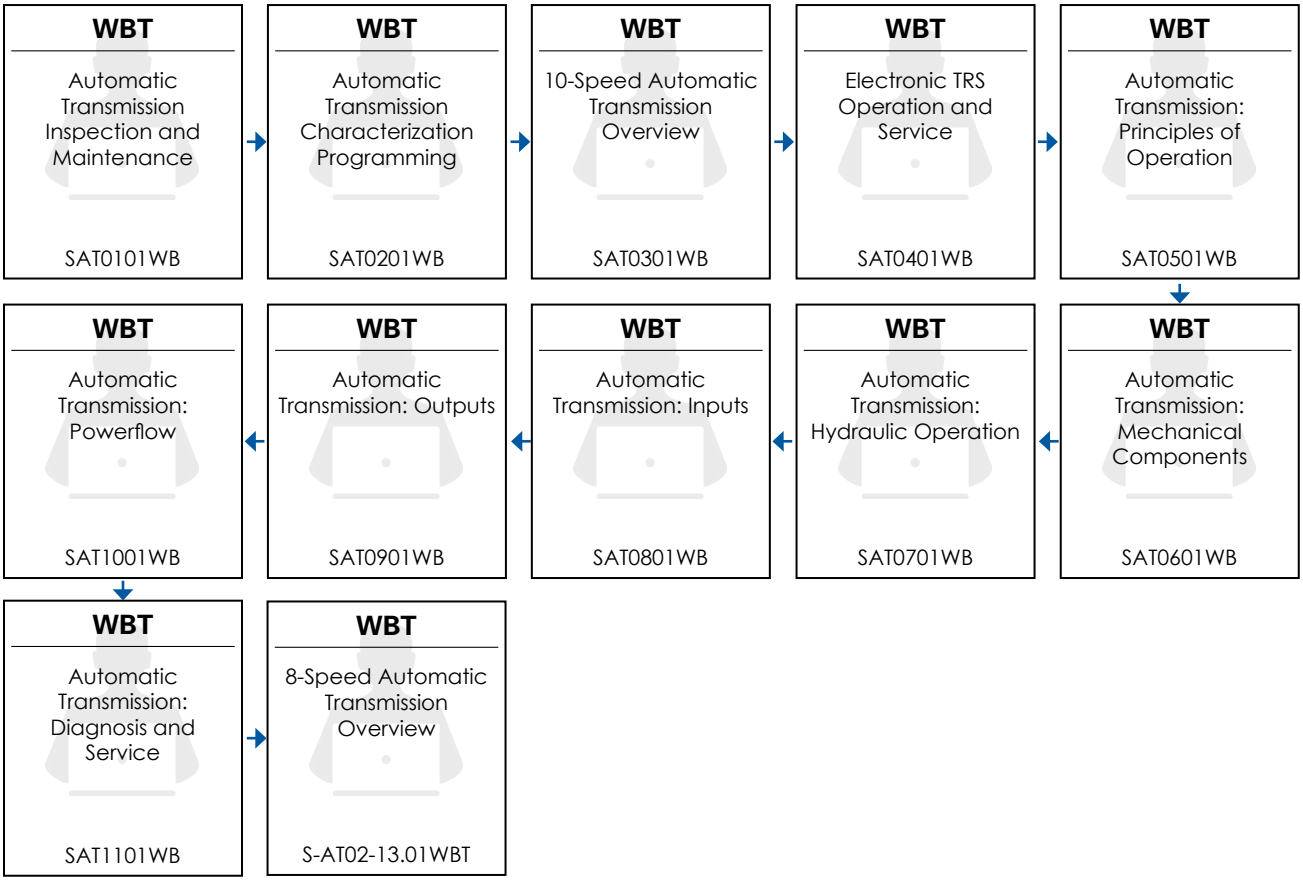
This video demonstrates inspection and diagnosis of engine mounts for front wheel drive and rear wheel drive vehicles.

Languages: English

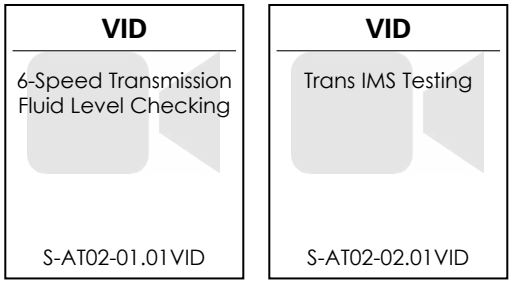
A2: AUTOMATIC TRANSMISSION

A recommended path for completing the Automatic Transmission curriculum is outlined below. To complete the training below and to search for and complete additional training, visit acdelcotraining.com.

RECOMMENDED PATH



ADDITIONAL TRAINING



A2: AUTOMATIC TRANSMISSION

Web-Based Training

AUTOMATIC TRANSMISSION INSPECTION AND MAINTENANCE — SAT0101WB

This course covers how to perform visual inspections of the automatic transmission system. The course also covers service procedures for removing and replacing the external speed sensor seal and adjusting the transmission fluid level.

Languages: English

AUTOMATIC TRANSMISSION CHARACTERIZATION PROGRAMMING — SAT0201WB

This course describes the purpose and process to successfully complete the Solenoid Valve Characterization Reprogramming Procedure required for all new eight, nine and ten speed automatic transmissions. This course will direct you on the proper programming required to store the information in the Transmission Control Module. When specific transmission components have been replaced during service, the characterization data must be retrieved from a database and reprogrammed into the Transmission Control Module. Upon completing this course, participants will be able to identify the purpose and importance of characterization programming, identify important elements within the Solenoid Valve Characterization Programming, and identify the process and steps involved to successfully perform the Solenoid Valve Characterization Programming.

Languages: English/French

10-SPEED AUTOMATIC TRANSMISSION OVERVIEW — SAT0301WB

This course presents an overview of the new 10L90 10-speed automatic transmission, the newest rear wheel drive transmission developed by General Motors. This course provides technicians with an overview of the mechanical, hydraulic, and electrical components necessary for its proper operation. Technicians will review the different clutches and gear sets used to achieve the forward and reverse gears. Fluid and filters are discussed to ensure proper operation and servicing. Finally, the programming is reviewed to ensure a quality repair.

Languages: English/French

ELECTRONIC TRS OPERATION AND SERVICE — SAT0401WB

This course covers the Electronic Transmission Range Select (ETRS) system. The characteristics of various features are described in this course, including ETRS system benefits, external and internal components, operation, and service procedures.

Languages: English

AUTOMATIC TRANSMISSION: PRINCIPLES OF OPERATION — SAT0501WB

This WBT course covers automatic transmission principles and hydraulics. Specific topics include characteristics of the planetary gear set, theory of torque multiplication, and reduction and types of automatic transmissions. Upon completion of this course, technicians will be able to recall principles of automatic transmissions and recall principles of hydraulics.

Languages: English/French

AUTOMATIC TRANSMISSION: MECHANICAL COMPONENTS — SAT0601WB

This WBT course covers torque converter characteristics, mechanical system fundamentals and characteristics of the one-way clutch and final drive. Other components include the torque converter pump, stator lock-up, turbine, brazed hammer down blades, stator, torque converter clutch, and planetary gear set types. Upon completion of this course, technicians will be able to identify fundamentals of the torque converter, identify fundamentals of the mechanical system, and identify characteristics of the one-way clutch and the final drive.

Languages: English/French

AUTOMATIC TRANSMISSION: HYDRAULIC OPERATION — SAT0701WB

This course covers the hydraulic system characteristics and valve body components of automatic transmissions systems. Upon completion of this course, technicians will be able to recall the hydraulic system characteristics of an automatic transmission and identify characteristics of the valve body.

Languages: English

AUTOMATIC TRANSMISSION: INPUTS — SAT0801WB

This course covers electrical system inputs of an automatic transmission system. Topics also include: driver shift control types, manual shaft position switch types, pressure switches, speed sensors, temperature sensors, and throttle position. Upon completion of this course, technicians will be able to identify the electrical system inputs in an automatic transmission.

Languages: English/French

AUTOMATIC TRANSMISSION: OUTPUTS — SAT0901WB

This course covers electrical system outputs of an automatic transmission system. Topics also include: output solenoid characteristics, control module characteristics and operation. Upon completion of this course, technicians will be able to identify the electrical system outputs in an automatic transmission.

Languages: English/French

AUTOMATIC TRANSMISSION: POWERFLOW — SAT1001WB

This course covers the automatic transmission control system power flow and modes of operation. Specific operations include: clutch-to-clutch, freewheeling and engine braking. Upon completion of this course, technicians will be able to recall automatic transmission system power flow and modes of operation and identify the steps of automatic transmission diagnostic process.

Languages: English/French

AUTOMATIC TRANSMISSION: DIAGNOSIS AND SERVICE — SAT1101WB

This WBT course covers the hydraulic system characteristics and valve body components of automatic transmissions systems. Specifics include characteristics and types of: automatic transmission fluids, fluid pumps, lubrication systems, accumulator types, solenoids, and valve bodies. Upon completion of this course, technicians will be able to recall automatic transmission diagnostic procedures and recall how to perform automatic transmission service procedures.

Languages: English/French

8-SPEED AUTOMATIC TRANSMISSION OVERVIEW — S-AT02-13.01WBT

This WBT course presents an overview of the 8-speed automatic transmission known as the 8L90. Topics cover the 8L90's features, components, power flow and programming requirements, as well as the start-stop system. Upon completion of this course, technicians will be able to identify features of the 8L90, identify components of the 8L90, identify the power flow through the hard components for each gear of the 8L90, recall the requirements for programming the 8L90, and describe the start-stop system.

Languages: English

TechTube Videos

6-SPEED TRANSMISSION FLUID LEVEL CHECKING — S-AT02-01.01VID

This video demonstrates how to properly check and adjust fluid levels on the GM 6T70/75, 6T40 and 6L80 automatic transmissions.

Languages: English

TRANS IMS TESTING — S-AT02-02.01VID

This video demonstrates how to test the trans Internal Mode Switch (IMS) on GM's 6L80/6L90 automatic transmissions.

Languages: English

A3: MANUAL TRANSMISSION / DRIVELINE

A recommended path for completing the Manual Transmission / Driveline curriculum is outlined below. To complete the training below and to search for and complete additional training, visit acdelcotraining.com.

RECOMMENDED PATH

SST — Manual Transmission Clutch Self Study Training — SFN1601SF

WBT — Passenger Car AWD — SMT0101WB

WBT — Propshafts & Rear Axles: Rear Axle Operation (W1) — SMT0201WB

WBT — Propshafts & Rear Axles: Drive Shaft Operation (W2) — SMT0301WB

WBT — Propshafts & Rear Axles: Rear Drive Modules — SMT0401WB

WBT — Propshafts & Rear Axles: Electronic Differentials — SMT0501WB

WBT — Propshafts & Rear Axles: Front Drive Axles (W1) — SMT0601WB

WBT — Propshafts & Rear Axles: Diagnosis — SMT0701WB

WBT — Manual Transmission: Overview — SMT0801WB

WBT — Manual Transmission: Clutch Operation & Diagnosis — SMT0901WB

WBT — Manual Transmission: FWD Operation — SMT1001WB

WBT — Manual Transmission: RWD Operation — SMT1101WB

WBT — Manual Transmission: FWD Diagnosis — SMT1201WB

WBT — Manual Transmission: RWD Diagnosis — SMT1301WB

WBT — Passenger Car AWD Systems: Diagnosis — SMT1401WB

WBT — Truck AWD/4WD Operation, Diagnosis & Service 1: Operation — S-MT03-09.01WBT

WBT — Truck AWD/4WD Operation, Diagnosis & Service 2: Diagnosis — S-MT03-10.01WBT

WBT — Drivetrain Inspection and Maintenance — S-MT03-13.02WBT

ILT — All-Wheel Drive / Four Wheel Drive — S-MT03-01.01ILT

ADDITIONAL TRAINING

VID — Proper Way to Check Ring Gear Backlash — S-MT03-01.01VID

VID — Transfer Case — S-MT03-02.01VID

VID — Front Axle Actuator Diagnosis — S-MT03-03.01VID

Self Study Training

MANUAL TRANSMISSION CLUTCH SELF STUDY TRAINING — SFN1601SF

An explanation of popular automotive clutch systems. Includes clutch discs, pressure plates, mechanical and hydraulic release systems, flywheels and pilot bearings.

Languages: English

Web-Based Training

PASSENGER CAR AWD — SMT0101WB

This course provides an overview to service technicians on the newest selectable All-Wheel Drive (AWD) systems for Front-Wheel Drive (FWD) vehicles. This course covers the single and twin clutch AWD systems with the selectable power transfer unit, as well as an overview of the system, its components, and operation.

Languages: English /French

PROPSHAFTS & REAR AXLES: REAR AXLE OPERATION (W1) — SMT0201WB

This WBT course covers propshafts and rear drive axle fundamentals, characteristics, types, operation, and diagnosis.

Upon completing of this course, technicians will be able to identify propshaft and rear drive axle fundamentals and characteristics, recognize the difference between semi and full-floating rear drive axle mechanical system, and recall rear drive axle operation.

Languages: English/French

PROPSHAFTS & REAR AXLES: DRIVE SHAFT OPERATION (W2) — SMT0301WB

This course covers propshaft fundamentals, including their mechanical operation and characteristics covered are types of propshaft joints, bearings, and assemblies. Upon completion of this course, participants will be able to recall propshaft types and characteristics and recall front-wheel drive wheel driveshaft fundamentals.

Languages: English/French

PROPSHAFTS & REAR AXLES: REAR DRIVE MODULES — SMT0401WB

This course covers the operation of rear-drive modules for all-wheel drive vehicles. Covered topics include all-wheel drive electric clutch operation and all-wheel drive electro-hydraulic clutch operation. Upon completing of this course, technicians will be able to identify how to diagnose and service an all-wheel drive electric clutch, identify how to diagnose and service an all-wheel drive electro-hydraulic clutch, and identify how to diagnose and service a rear-wheel drive direct-connect module.

Languages: English/French

PROPSHAFTS & REAR AXLES: ELECTRONIC DIFFERENTIALS — SMT0501WB

This course covers propshaft fundamentals including their mechanical operation and characteristics as well as FWD wheel drive shaft assembly fundamentals. Characteristics covered are types of propshaft joints, bearings and assemblies. In addition, the course describes the proper diagnosis of semi- and full-floating rear drive axle systems using symptom-based methods, operational tests, and visual inspection. Upon completing of this course, technicians will be able to identify fundamentals of the mechanical system, identify characteristics of the one-way clutch and the final drive, identify characteristics of the one-way clutch and the final drive.

Languages: English /French

PROPSHAFTS & REAR AXLES: FRONT DRIVE AXLES (W1) — SMT0601WB

This course covers front drive axle types, components, and operation. Upon completing of this course, technicians will be able to identify fundamentals of the mechanical system, identify characteristics of the one-way clutch and the final drive, and identify characteristics of the one-way clutch and the final drive.

Languages: English/French

PROPSHAFTS & REAR AXLES: DIAGNOSIS — SMT0701WB

This course covers the operation, diagnosis, and service of several types of rear-drive modules for all-wheel drive and rear-wheel drive vehicles. Topics include the proper diagnosis of semi- and full-floating rear drive-axle systems using symptom-based methods, operational tests, and visual inspection; and rear-wheel drive direct-connect module diagnosis and service. Upon completion of this course, participants will be able to identify how to diagnose semi- and full-floating rear drive axles, identify how to diagnose and service a rear-wheel-drive direct-connect module.

Languages: English/French

A3: MANUAL TRANSMISSION / DRIVELINE

MANUAL TRANSMISSION: OVERVIEW — SMT0801WB

This course covers manual driveline fundamentals, including the manual drivetrain and axle types, location, and service. This course also covers how to service a manual drivetrain and axle using safe practices. Upon completion of this course, participants will be able to identify manual driveline fundamentals.

Languages: English/French

MANUAL TRANSMISSION: CLUTCH OPERATION & DIAGNOSIS — SMT0901WB

This course covers manual transmission clutch types and operation. This course also covers how to diagnose clutch mechanical and hydraulic systems. Upon completion of this course, participants will be able to identify the manual transmission clutch types and operation and identify the manual transmission clutch diagnostics.

Languages: English/French

MANUAL TRANSMISSION: FWD OPERATION — SMT1001WB

This course covers front-wheel drive manual transmission fundamentals, mechanical systems, operation, and the electronic control system. Upon completion of this course, participants will be able to identify the front-wheel drive manual transmission characteristics, identify the front-wheel drive manual transmission mechanical systems, components, and shift mechanism characteristics, recall the front-wheel drive manual transmission operation, recall the front-wheel drive manual transmission electronic control system characteristics.

Languages: English/French

MANUAL TRANSMISSION: RWD OPERATION — SMT1101WB

This course covers Rear-Wheel Drive (RWD) characteristics, manual transmission clutch types, and manual shift mechanism types. This course also covers Tremec 6-speed manual transmission characteristics, mechanical component characteristics, and fluid characteristics. Upon completing this course, participants will be able to identify RWD characteristics, clutch types, and shift mechanisms and recall the characteristics and components of the Tremec 6-speed transmission.

Languages: English/French

MANUAL TRANSMISSION: FWD DIAGNOSIS — SMT1201WB

This course covers front-wheel drive manual transmission diagnostics and symptom-based manual transmission diagnostics. Upon completion of this course, technicians will be able to identify the steps to diagnose a manual transmission, identify the steps to diagnose a manual transmission using symptom-based diagnostics.

Languages: English/French

MANUAL TRANSMISSION: RWD DIAGNOSIS — SMT1301WB

This course covers Tremec 6-speed manual transmission operation and electronic control system characteristics and steps of operation. Upon completion of this course, technicians will be able to recall the operational steps of a Tremec 6-speed transmission, recall the characteristics and the operation of the manual Tremec 6-speed transmission electronic control system.

Languages: English/French

PASSENGER CAR AWD SYSTEMS: DIAGNOSIS — SMT1401WB

This course covers the diagnostic procedures for passenger car all-wheel drive systems, transfer cases, and rear drive axle systems. The diagnostic procedures discussed for passenger car all-wheel drive systems include preliminary visual inspections, functional tests, symptom-based diagnostics, Diagnostic Trouble Code (DTC)-based diagnostics, and scan tool data and special functions.

Upon completion of this course, technicians will be able to identify all-wheel drive system diagnostic procedures, recall how to diagnose all-wheel drive systems using symptom-based diagnostics, recall how to diagnose all-wheel drive systems using DTC-based diagnostics.

Languages: English/French

TRUCK 4WD / AWD OPERATION AND DIAGNOSIS 1: OPERATION — S-MT03-09.01WBT

This course focuses on the types, characteristics, and operations of manual and electric shift transfer cases as well as the All-Wheel Drive (AWD) viscous clutch style transfer case. Some diagnostic practices are also described in this course.

Languages: English/French

TRUCK 4WD / AWD OPERATION AND DIAGNOSIS 2: DIAGNOSIS — S-MT03-10.01WBT

This course focuses on the types, characteristics, and operations of manual and electric shift transfer cases as well as the All-Wheel Drive (AWD) viscous clutch style transfer case. Some diagnostic practices are also described in this course.

Languages: English/French

DRIVETRAIN INSPECTION AND MAINTENANCE — S-MT03-13.02WBT

This course covers the characteristics and inspection procedures for the manual transmission clutch, manual transmission fluid, and transfer case. This course also covers the types and service procedures for drivetrain axles.

Languages: English

PASSENGER CAR AWD SYSTEMS: OVERVIEW — SMT1801WB

This course provides the fundamentals to service General Motors (GM) passenger cars with all-wheel drive systems. Topics discussed include an all-wheel drive system overview, the types of passenger car all-wheel drive systems, the characteristics and operation of a passenger car all-wheel drive system, and the types and operation of the passenger car all-wheel drive transfer case. In this course passenger car refers to all cars, Sport Utility Vehicles (SUVs), and crossovers that do not use a full frame.

Languages: English/French

Instructor-Led Training

ALL-WHEEL DRIVE / FOUR WHEEL DRIVE — S-MT03-01.01ILT

This Instructor-led Training (ILT) course will provide technicians the opportunity to learn about the various four wheel drive (4WD) and all-wheel drive (AWD) systems, how power is divided in these systems, components of four wheel drive (4WD) and all–wheel drive (AWD) systems, and some diagnostics of four wheel drive (4WD) and all-wheel drive (AWD) systems. The course will also include real world scenarios based on vehicles from several manufactures, and vehicle exercises to explore and apply diagnostic processes to some common symptoms.

Languages: English

TechTube Videos

PROPER WAY TO CHECK RING GEAR BACKLASH — S-MT03-01.01VID

This video demonstrates how to measure backlash of a ring and pinion gearset and what the measurements mean.

Languages: English

TRANSFER CASE — S-MT03-02.01VID

This video describes issues that can affect 4WD operation that you should be aware of before replacing a transfer case.

Languages: English

FRONT AXLE ACTUATOR DIAGNOSIS — S-MT03-03.01VID

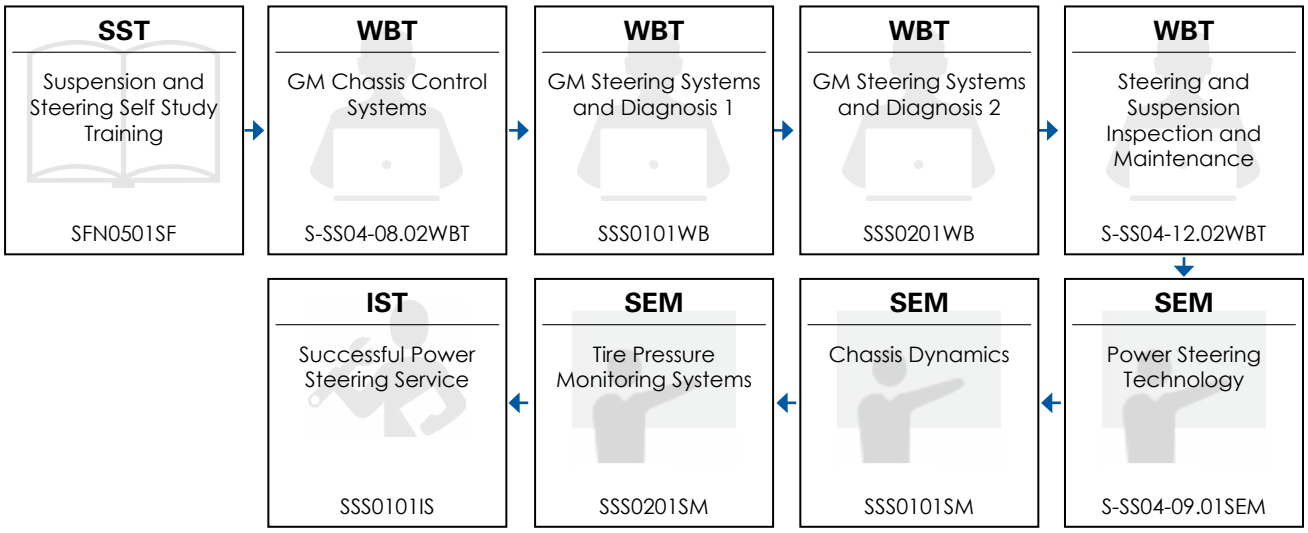
This video shows how to verify if a front axle actuator is operating using a scan tool and how the actuator connects the front axles together.

Languages: English

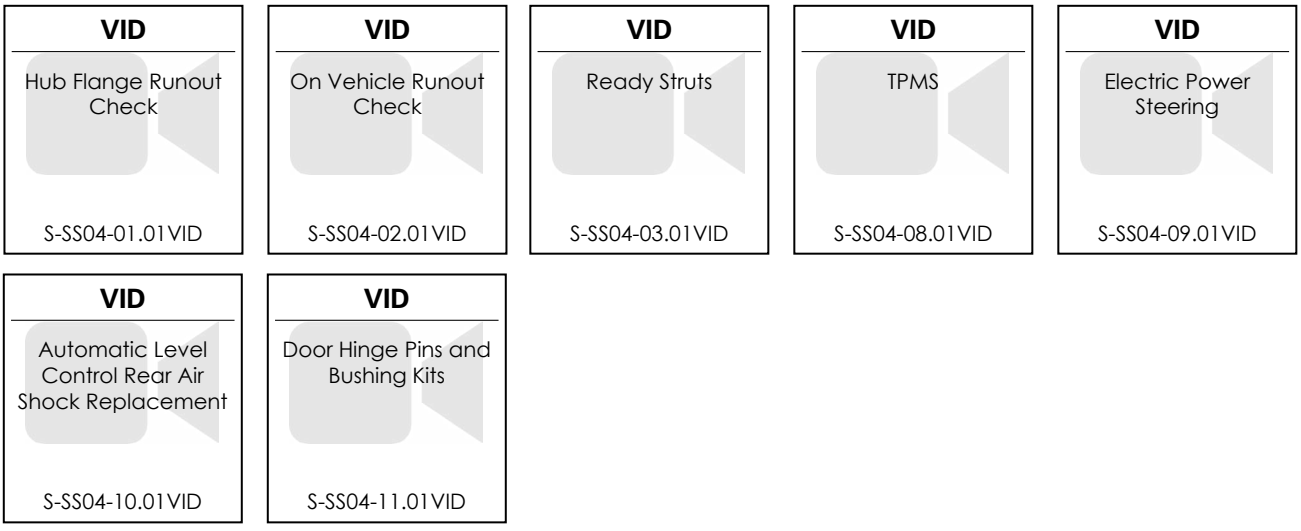
A4: SUSPENSION / STEERING

A recommended path for completing the Suspension and Steering curriculum is outlined below. To complete the training below and to search for and complete additional training, visit acdelcotraining.com.

RECOMMENDED PATH



ADDITIONAL TRAINING



Self Study Training

SUSPENSION AND STEERING SELF STUDY TRAINING — SFN0501SF

This self study course reviews suspension and steering components, operation and service through a systems overview of the suspension and steering and a functional component review.

Languages: English

Web-Based Training

GM CHASSIS CONTROL SYSTEMS — S-SS04-08.02WBT

This WBT component covers the components, characteristics, and operation of various chassis control systems found in GM vehicles. Suspension system types, ride and alignment control, air suspension systems, automatic level control, electronically controlled damping, tire pressure monitoring, and alignment will be covered in this course. Upon completion of this WBT, technicians will be able to identify the characteristics and operation of independent and non-independent suspension systems, identify the components and operation of ride control and alignment control, identify the function of the air suspension systems, identify the components and operation of the automatic level control systems, identify the characteristics and operation of electronically controlled damping systems, identify the characteristics and operation of the direct tire pressure monitoring system, and identify the types and characteristics of alignment.

Languages: English/French

GM STEERING SYSTEMS AND DIAGNOSIS 1 — SSS0101WB

This course covers the characteristics, types, operation, and diagnosis of the steering system and its main components, as well as a high level overview of some disassembly and assembly service procedures and tools.

Languages: English/French

GM STEERING SYSTEMS AND DIAGNOSIS 2 — SSS0201WB

This course covers the features, characteristics, and operation of the electronically controlled power steering system and the electronic assist power steering system. Upon completion of this course, participants will be able to recall the features, characteristics, and operation of electronically controlled hydraulic power steering systems

Languages: English/French

STEERING AND SUSPENSION INSPECTION AND MAINTENANCE — S-SS04-12.02WBT

This WBT provides the general and specific inspection and maintenance procedures for the steering and suspension systems. The technician will learn how to inspect and identify worn and damaged parts of the steering and suspension system. Upon completion of this course, service technicians will be able to identify the operation of the power steering systems, identify the inspection and maintenance process for inner and outer tie rods, identify the inspection and maintenance process for ball joints, differentiate between the operation and inspection procedures of other steering system components, recall the function of the suspension components, differentiate between dependent and independent front suspension, differentiate between dependent, semi-independent, and independent rear suspension, recall the operation and inspection of the electronic suspension, and identify the operation, inspection, and maintenance of the wheels and tires.

Languages: English

Seminar

CHASSIS DYNAMICS — SSS0101SM (IN-PERSON) SSS0101VS (VIRTUAL)

Intended for the experienced technician, this seminar will explore the symptoms and corrective actions needed to address abnormal ride and handling concerns. Special attention will be paid to electronic ride control systems, conventional steering and suspension systems, modified vehicles, alignment geometry, yaw control and dynamic steering, and required calibration / programming procedures.

Languages: English

A4: SUSPENSION / STEERING

TIRE PRESSURE MONITORING SYSTEMS

SSS0201SM (IN-PERSON)
SSS0201VS (VIRTUAL)

This instructor-led training seminar will cover Tire Pressure Monitoring Systems installed on various vehicles. Direct and indirect systems will be covered in detail and will include Federal regulation and repair compliance requirements. Various Original Equipment Manufacturers (OEMs) will be highlighted, including an overview of the operation, diagnosis, and servicing of the systems and their components. Additional topics include: winter / accessory wheel fitment, TPMS tools, parts and information resources.

Languages: English

POWER STEERING TECHNOLOGY

S-SS04-09.01SEM (IN-PERSON)
S-SS04-09.01VS (VIRTUAL)

This 3-hour seminar will cover some of the electric power steering systems found today. Including the components and operation, diagnostics and servicing these electric power steering systems. Even though electric power steering technology is expanding into more vehicles, let us not forget that many vehicles on the road still have hydraulic power steering. Additionally, some unique features of new technology found in electronically enhanced hydraulic systems, as well as diagnostic and service tips will be discussed.

Languages: English

InShop Training

SUCCESSFUL POWER STEERING SERVICE

SSS0101IS (IN-PERSON)
SSS0101VI (VIRTUAL)

This 1-hour InShop will cover the proper procedures for effective diagnosis and repair of today's hydraulic and electric power steering systems. We will discuss ways to prevent come backs by using proper diagnostic and repair procedures. Common installation issues will be discussed including the use of proper fluids, flushing, and pulley installation. Electronic power steering installation and setup procedures will be discussed.

Languages: English

TIRE PRESSURE MONITORING SYSTEMS

SSS0201IS (IN-PERSON)
SSS0201VI (VIRTUAL)

This instructor-led training InShop will cover Tire Pressure Monitoring Systems installed on various vehicles. Direct and indirect systems will be covered and will include Federal regulation and repair compliance requirements. Various Original Equipment Manufacturers (OEMs) will be highlighted, including an overview of the operation, diagnosis, and servicing of the systems and their components

Languages: English

TechTube Videos

HUB FLANGE RUNOUT CHECK

S-SS04-01.01VID

This video demonstrates the process on how to properly measure hub flange runout.

Languages: English

ON VEHICLE RUNOUT CHECK

S-SS04-02.01VID

This video demonstrates how to measure on vehicle runout of the tire assembly, which includes the tire, rim and hub.

Languages: English

READY STRUTS

S-SS04-03.01VID

This video describes how to diagnose strut concerns and why you should use ACDelco Professional ReadyStrut complete assemblies.

Languages: English

TPMS

S-SS04-08.01VID

This video describes the operation of tire pressure monitor systems.

Languages: English

ELECTRIC POWER STEERING — S-SS04-09.01VID

This video describes the various types of electric power steering systems.

Languages: English

AUTOMATIC LEVEL CONTROL REAR AIR SHOCK REPLACEMENT — S-SS04-10.01VID

This video demonstrates diagnosis and repair of General Motors Auto Level Control Rear Air Shocks, from verifying air pressure, to proper installation of the replacement air shocks.

Languages: English

DOOR HINGE PINS AND BUSHING KITS — S-SS04-11.01VID

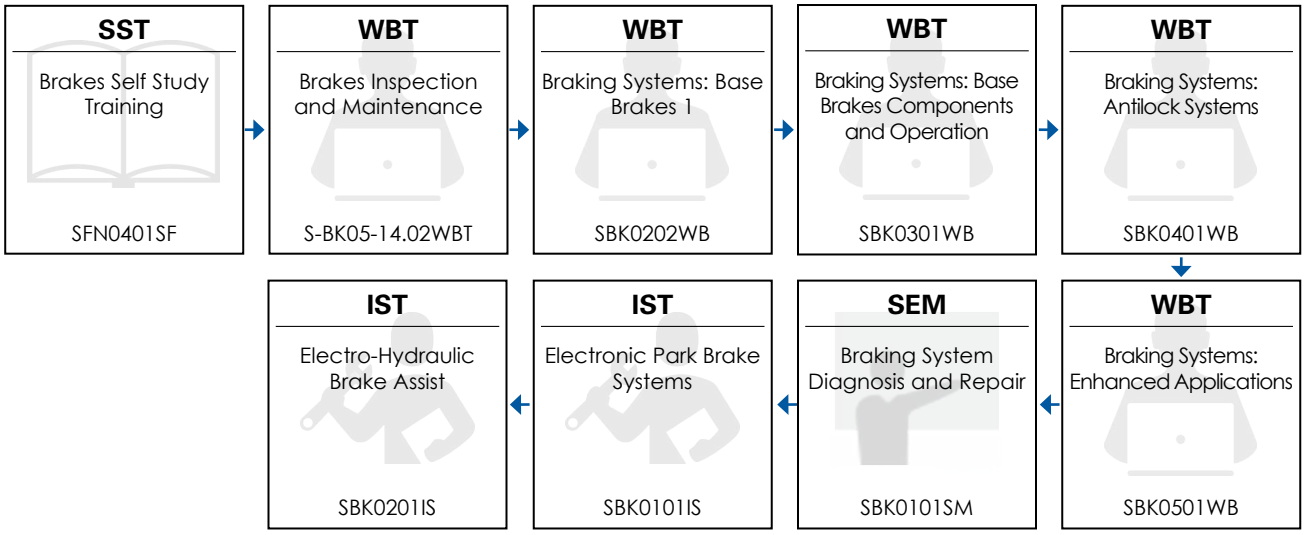
This video demonstrates inspection and replacement procedures of door hinge pins and bushings, highlighting ACDelco's greaseable replacement pins and complete hinge assemblies.

Languages: English

A5: BRAKES

A recommended path for completing the Brakes curriculum is outlined below. To complete the training below and to search for and complete additional training, visit acdelcotraining.com.

RECOMMENDED PATH



ADDITIONAL TRAINING

Self Study Training

BRAKES SELF STUDY TRAINING — SFN0401SF

This self study guide covers braking system components and their operation. Topics include an overview of braking systems, description and operation of braking subsystem components, and advanced braking systems.

Languages: English

Web-Based Training

BRAKES INSPECTION AND MAINTENANCE — S-BK05-14.02WBT

Brake systems enable a vehicle to stop in a controlled manner. The performance of this system is critical to the safety and well-being of the occupants, other drivers, and pedestrians. Familiarization of the brake system components and operation is essential to perform a proper inspection. This course covers the basic procedures for the inspection and maintenance of brake systems. The course presents an overview of the relevant components and their operation, and covers the appropriate inspection and maintenance procedures.

Languages: English

BRAKING SYSTEMS: BASE BRAKES 1 — SBK0202WB

This course covers brake fundamentals: the apply system, the boost systems, and the hydraulic braking system.

Languages: English/French

BRAKING SYSTEMS: BASE BRAKES 2 — SBK0302WB

This course covers the components, types, and operation of drum brakes, disc brakes, and manual and electronic parking brakes. The course also provides information about calibration, brake pad life monitoring systems, and tests related to braking systems. Upon completion of this course, technicians will be able to identify the components, types, and operation of drum brakes and disc brakes. Identify the components, types, and operation of manual and electronic parking brakes. Recall related service topics, including calibration and brake pad life systems.

Languages: English/French

BRAKING SYSTEMS: ANTILOCK SYSTEMS — SBK0401WB

This WBT course covers Antilock Braking System (ABS) characteristics and operation, and automatic traction control characteristics and operation. This course also covers vehicle stability enhancement system theory, characteristics, and operation.

Languages: English/French

BRAKING SYSTEMS: ENHANCED APPLICATIONS — SBK0501WB

This WBT course covers the enhanced applications of braking systems, including optimized braking systems and performance braking systems.

Languages: English/French

MEDIUM DUTY AIR BRAKE SYSTEMS — SBK0101WB

This course will detail the air brake and air brake antilock braking systems for medium duty trucks. Upon completing this course, participants will be able to summarize the air brake system of medium duty trucks, recognize the control components of the air brake system, recognize the foundation brake components of the air brake system, relate how each component operates within the air brake system, and summarize how the air brake antilock braking system functions.

Languages: English

Seminar

BRAKING SYSTEM DIAGNOSIS AND REPAIR — SBK0101SM (IN-PERSON) SBK0101VS (VIRTUAL)

This instructor-led training seminar focuses on braking system diagnosis, and covers components, operation, and proper service practices. This course highlights real world case studies to address brake noise, pulsation, pad wear, fluid leaks, and concerns with power assist systems. Enhanced braking system designs and features by various manufacturers will also be covered.

Languages: English

A5: BRAKES

InShop Training

ELECTRONIC PARK BRAKE SYSTEMS

SBK0101IS (IN-PERSON)
SBK0101VI (VIRTUAL)

This instructor-led InShop training course provides an overview of the various electronic park brake systems installed on modern vehicles. Various Original Equipment Manufacturers (OEM's) systems will be covered, including an overview of the operation, diagnosis, and servicing of the systems.

Languages: English

ELECTRO-HYDRAULIC BRAKE ASSIST

SBK0201IS (IN-PERSON)
SBK0201VI (VIRTUAL)

This instructor-led InShop training course provides an overview of the electro-hydraulic brake assist system installed on various GM vehicles. System features and benefits will be highlighted, as well as the operation, diagnosis and servicing of the system.

Languages: English

TechTube Videos

GM TRUCK BRAKE LINE KITS

S-BK05-03.01VID

This service video will address 1999-2007 GM full sized pickup trucks and SUVs that are in need of a hydraulic brake line repair. ACDelco offers pre-formed and flared brake line kits, each of which is sold with all the lines needed to replace the entire brake line assembly for these vehicles. This video will illustrate the key points of this repair as well as bulletin 14D-101.

Languages: English

COMPLEX BRAKE TUBE BENDING

S-BK05-02.01VID

The Brake Tube Bending video demonstrates the art of tubing bends and brake pipe coils without creating restrictions in the tubing.

Languages: English

MAINTAINING (QUALIFYING) YOUR BRAKE LATHE

S-BK05-01.01VID

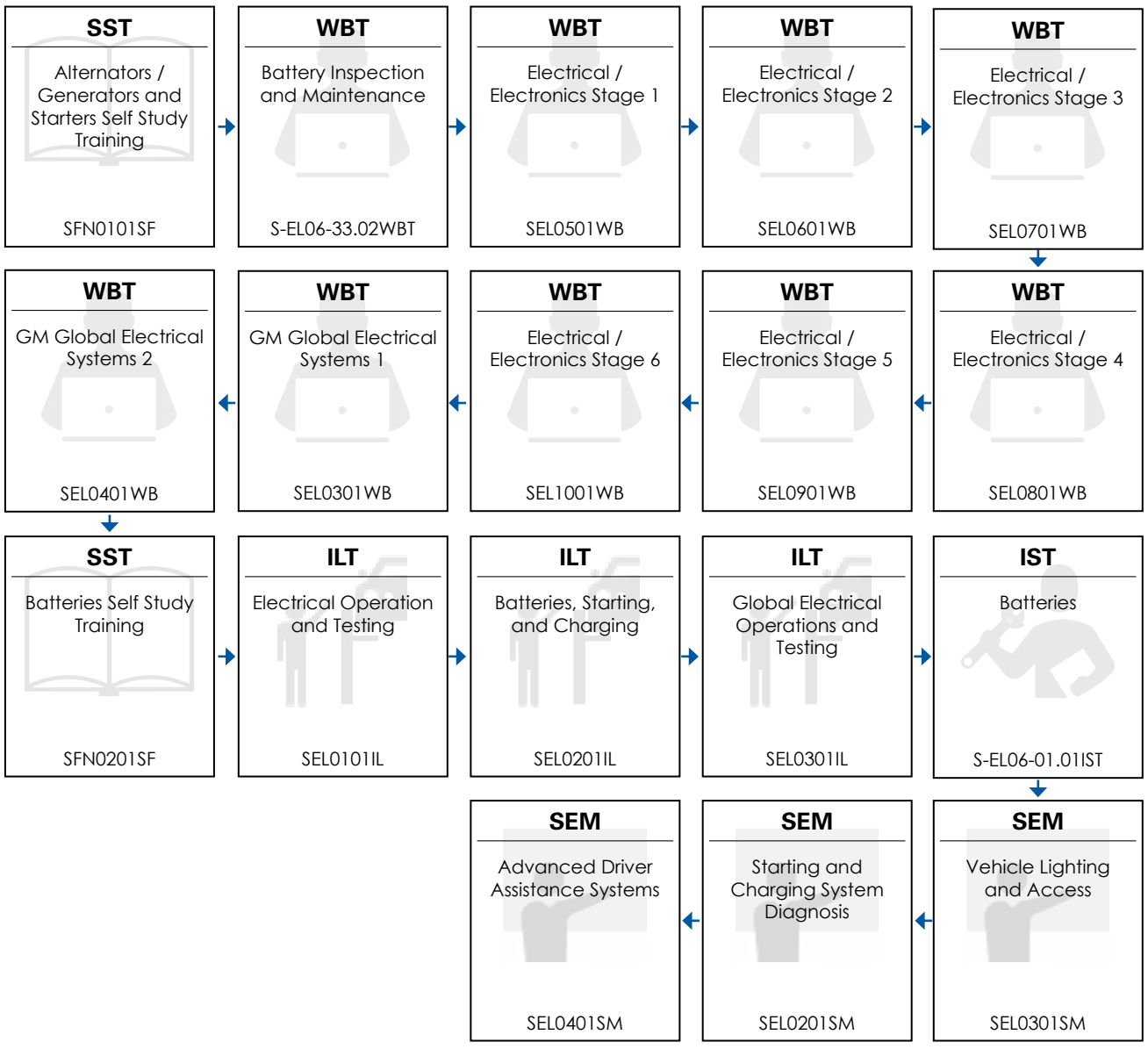
The Brake lathe qualification video will assist Technicians in the inspection of bench brake lathe components. This is done visually and through taking measurements of critical surfaces to ensure accurate and precise brake drum and rotor resurfacing avoiding run out issues.

Languages: English

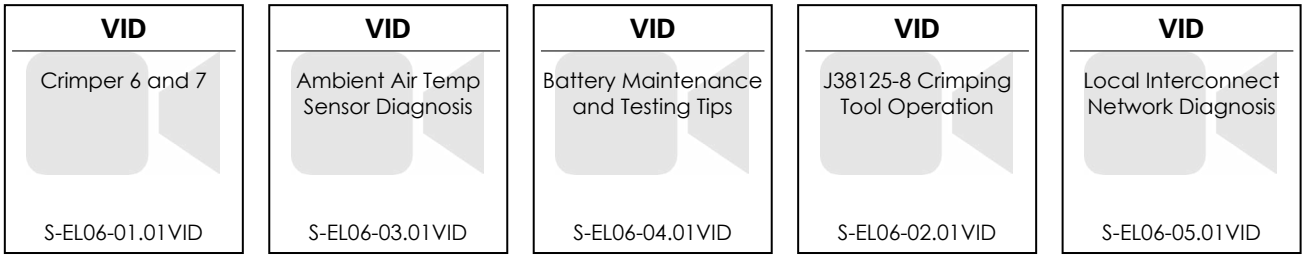
A6: ELECTRICAL / ELECTRONIC SYSTEMS

A recommended path for completing the Electrical / Electronic Systems curriculum is outlined below. To complete the training below and to search for and complete additional training, visit acdelcotraining.com.

RECOMMENDED PATH



ADDITIONAL TRAINING



A6: ELECTRICAL / ELECTRONIC SYSTEMS

Self Study Training

ALTERNATORS / GENERATORS AND STARTERS SELF STUDY TRAINING — SFN0101SF

An explanation of popular automotive alternator and starter designs. Includes alternator and starter functions as well as components, and hybrid vehicle starter-generator information.

Languages: English

BATTERIES SELF STUDY TRAINING — SFN0201SF

An explanation of popular automotive battery groups and designs. Includes construction, service and replacement information.

Languages: English

Web-Based Training

BATTERY INSPECTION AND MAINTENANCE — S-EL06-33.02WBT

This course presents an overview of the components and procedures related to battery inspection and maintenance. The course covers battery location, inspection, replacement, and jump-starting. It also identifies the characteristics and procedures for the inspection of electrical centers, and the operational modes of ignition devices. In addition, the course covers the steps on how to restore personal radio settings in a customer's vehicle after battery service.

Languages: English

GM GLOBAL ELECTRICAL SYSTEMS 1 — SEL0301WB

This course presents the principles of electrical circuits, including the common types of circuits and functions used in the electrical architecture of GM vehicles. Upon completion of this course, participants will be able to identify concepts of electrical circuits, including ground and voltage circuits, characteristics of signal circuits and control circuits, and serial data circuits and communication.

Languages: English/French

GM GLOBAL ELECTRICAL SYSTEMS 2 — SEL0401WB

This course presents standard procedures for the diagnosis of electrical systems in GM vehicles. Upon completion of this course, participants will be able to identify the characteristics of global diagnostics for electrical systems, including the information for the diagnosis of electrical faults, the diagnostic format to verify electrical circuits, and the logical order in which to test electrical systems.

Languages: English/French

ELECTRICAL / ELECTRONICS STAGE 1 — SEL0501WB

This WBT course focuses on the fundamental laws of electricity and reading electrical schematics. The topics covered in this course include voltage, current, resistance, voltage drop, Ohm's Law, electromagnetic induction, and electrical circuits. Upon completing this course, participants will be able to identify the basic characteristics of electricity, identify the basic characteristics of automotive electric circuits, and identify the characteristics of electrical circuit types.

Languages: English/French

ELECTRICAL / ELECTRONICS STAGE 2 — SEL0601WB

This WBT course focuses on the fundamentals of electricity and vehicle diagnosis and repair. The topics covered in this course include sources of automotive electricity, circuit protectors, circuit control devices, and circuit loads. Upon completing this course, participants will be able to identify sources of automotive electricity, identify the characteristics and functions of circuit protectors, identify the characteristics of circuit control devices, and identify the characteristics of circuit loads.

Languages: English/French

ELECTRICAL / ELECTRONICS STAGE 3 — SEL0701WB

This WBT course focuses on the fundamentals of the Digital Multimeter (DMM) controls and functions and DMM usage. The topics covered in this course include safety and caution, proper DMM set up, measurement scales, measuring voltage, measuring voltage drop, measuring resistance, and measuring amperage. Upon completing this course, participants will be able to recall Digital Multimeter (DMM) controls and functions, recall safety and caution, recognize proper set up, identify measurement scales, recall how to measure voltage, recall how to measure voltage drop, recall how to measure resistance, and recall how to measure amperage.

Languages: English/French

A6: ELECTRICAL / ELECTRONIC SYSTEMS

ELECTRICAL / ELECTRONICS STAGE 4 — SEL0801WB

This WBT course focuses on important types, characteristics, and diagnosis of various solid state electrical components. The topics covered in this course include characteristics of capacitors, types of semiconductors, characteristics of semiconductors, types of diodes, characteristics of diodes, diagnosis of diodes, and characteristics of transistors. Upon completing this course, participants will be able to recall the characteristics of capacitors, recall types of semiconductors, recall the characteristics of semiconductors, recall different types of diodes, recall the characteristics of diodes, recall diagnosis of diodes, and recall the characteristics of transistors.

Languages: English/French

ELECTRICAL / ELECTRONICS STAGE 5 — SEL0901WB

This WBT course will familiarize the service technicians with electrical and electronics systems used on today's GM vehicles, as well as the characteristics and functions of control modules. The service technicians will also become familiarized with the characteristics and diagnosis of various electronic sensors and communication throughout the vehicle. Upon completing this course, participants will be able to identify common characteristics and functions of control modules, identify the types of variable resistance sensors, identify the characteristics and diagnosis of various electronic sensors, and identify important features of communication systems.

Languages: English/French

ELECTRICAL / ELECTRONICS STAGE 6 — SEL1001WB

This WBT course will familiarize the service technicians with electrical and electronics systems used on GM vehicles. The service technicians will also become familiarized with the fundamentals of electricity and how it pertains to successful vehicle diagnosis and repair. Upon completing this course, participants will be able to, identify electrical circuit components, identify the characteristics of electrical circuit faults, and identify the characteristics of electrical circuit repairs.

Languages: English/French

12V STOP / START SYSTEM: OVERVIEW, COMPONENTS AND OPERATION — S-EL06-68.01WBT

This course presents an overview of the 12V Stop / Start system, including its function, operation, and diagnosis. Participants will acquire a sound understanding of how the Stop / Start system works, enabling them to service vehicles equipped with this system more effectively.

Languages: English

12V STOP / START SYSTEM 2 — S-EL06-79.01WBT

This course presents an overview of the 12V Stop / Start System, including the three different types, how they operate, features, and components. Topics include information about the benefits and the supporting automatic transmission fluid systems. Participants will acquire a sound understanding of how the 12V Stop / Start System works, enabling them to service vehicles equipped with this system more effectively.

Languages: English

GM GLOBAL ELECTRICAL SYSTEMS: CIRCUIT OPERATIONS — SEL6301WB

This course presents the types and characteristics of common vehicular electrical circuits in GM vehicles. Topics include the functions of the serial data gateway module and comparisons of the five circuit types.

Languages: English

STRATEGY BASED DIAGNOSIS — SEL6401WB

This course covers GM's strategy based diagnostics process and is intended to assist service technicians in diagnosing vehicle issues. Upon completion of this course, participants will be able to recognize how to verify the vehicle concern and perform preliminary checks. Identify diagnostic procedures, and recall how to isolate and repair the root cause and verify the repair.

Languages: English

VOLTAGE DROP TESTING — SEL6501WB

This course covers the fundamentals of an electrical circuit. It also covers how to safely perform voltage testing. Upon completion of this course, participants will be able to recall the fundamentals of electricity recall the safe methods for performing voltage drop testing.

Languages: English

A6: ELECTRICAL / ELECTRONIC SYSTEMS

SUPER CRUISE: INTRODUCTION - VIP SYSTEM — SEL6601WB

This course provides information about the characteristics and functionality of GM's Super Cruise system, which assists drivers with highway cruising. The focus is on the system's function in vehicles with VIP (Vehicle Intelligence Platform) electrical architecture. This includes the hands-off lane changing function. Always consult Service Information for the correct procedures and specifications, and check local regulations because the laws in some regions may not permit hands-off driving. Upon completion of this course, technicians will be able to identify the technologies and components of the Super Cruise system. Recall the operation and limitations of the Super Cruise driver assistance system.

Languages: English

Instructor-Led Training

ELECTRICAL OPERATION AND TESTING — SEL0101IL

This Instructor-led Training (ILT) course covers the properties of electricity, electrical testing, and diagnosis. Topics covered include: review of the common circuits and functions used in vehicle electrical systems, Digital Multimeter (DMM) functions and usage, test lights, terminal service and component testing. Exercises allow participants to apply circuit testing strategies and tools to different components, circuits, and functions.

Languages: English

BATTERIES, STARTING, AND CHARGING — SEL0201IL

This Instructor-led Training (ILT) course covers battery, starting, and charging system component operation, diagnosis and testing, and best service practices. Hands-on exercises provide opportunities for improving skills, performing measurements, interpreting test results, and making diagnostic decisions.

Languages: English

GLOBAL ELECTRICAL OPERATIONS AND TESTING — SEL0301IL

This Instructor-led Training (ILT) course covers the properties of electricity, interpreting and using electrical schematics, advanced Digital Multimeter (DMM) usage, scan tool diagnosis tactics, and alternate test tool usage. Hands-on exercises provide opportunities for practicing skills, making measurements, interpreting test results and making diagnostic decisions.

Languages: English

Seminar

BATTERY MARKETER — SEL0101SM (IN PERSON) SEL0101VS (VIRTUAL)

This course will focus on the ACDelco battery product line. Attending participants will be prepared to sell and support ACDelco branded batteries. At a high level, discussion will include battery function, service, safety, and warranty when handling batteries, battery industry sales, and marketing batteries to installers.

Languages: English

STARTING AND CHARGING SYSTEM DIAGNOSIS — SEL0201SM (IN-PERSON) SEL0201VS (VIRTUAL)

This seminar covers battery, starting, and charging system component operation, diagnosis and testing, and correct service practices. The discussion on battery operation will include details on flooded and Absorbent Glass Mat, (AGM) types of batteries with emphasis on correct diagnosis and service. Starting topics will include processor controlled cranking systems, stop / start technology, and current diagnostic procedures. Participants will discuss computer-controlled charging systems including Regulated Voltage Controls (RVC), electrical power management, and advanced diagnostic procedures.

Languages: English

VEHICLE LIGHTING AND ACCESS — SEL0301SM (IN PERSON) SEL0301VS (VIRTUAL)

This seminar covers vehicle lighting and access system component operation, diagnosis, testing and correct service practices. The discussion on vehicle lighting systems will include details on bulb monitoring, Pulse Width Modulated (PWM) lamp control, LED lighting, xenon lighting, dynamic headlight range and level control, adaptive forward lighting, laser lighting, and vehicle lighting system diagnostic strategies. Vehicle access system topics will include door lock, liftgate, and trunk release system operation and diagnostic strategies. Participants will discuss movable glass systems including power window system operation, and diagnostic strategies for door windows, back glass and sunroof systems.

Languages: English

ADVANCED DRIVER ASSISTANCE SYSTEMS

SEL0401SM (IN-PERSON)
SEL0401VS (VIRTUAL)

This instructor-led training seminar focuses on Advanced Driver Assistance Systems installed on various vehicles. Systems including; Forward Collision Warning, Automatic Emergency Braking, Lane Keep Assist, Lane Departure Warning, Adaptive Cruise Control, Park Assist and others will be covered in detail. Various Original Equipment Manufacturers (OEMs) will be highlighted, including an overview of the operation, diagnosis, and servicing of the systems and their components.

Languages: English

InShop Training

STARTING AND CHARGING SYSTEM DIAGNOSIS AND REPAIR

SEL0101IS (IN-PERSON)
SEL0101VI (VIRTUAL)

This 1-hour InShop course covers the proper way to diagnose and repair starting and charging systems. Emphasis will be placed on discovering the root cause of starting and charging system failures and proper service procedures.

Languages: English

BATTERIES

S-EL06-01.01IST (IN-PERSON)
S-EL06-01.01VI (VIRTUAL)

This 1-hour InShop will cover battery testing and replacement. Topics include: battery testing, charging and replacement, parasitic draw testing and OnStar precautions.

Languages: English

ADVANCED DRIVER ASSISTANCE SYSTEMS

SEL0301IS (IN-PERSON)
SEL0301VI (VIRTUAL)

This instructor-led training focuses on Advanced Driver Assistance Systems installed on various vehicles. Systems including; Forward Collision Warning, Automatic Emergency Braking, Lane Keep Assist, Lane Departure Warning, Adaptive Cruise Control, Park Assist and others will be covered in detail. Various Original Equipment Manufacturers (OEMs) will be highlighted, including an overview of the operation of the systems and their components.

Languages: English

TechTube Videos

CRIMPER 6 AND 7

S-EL06-01.01VID

This short video will explain the proper use of electrical crimpers number 6 and 7 in the GM terminal and connector kit.

Languages: English

J38125-8 CRIMPING TOOL OPERATION

S-EL06-02.01VID

This video demonstrates the proper use of the J-38125-8 crimping tool for installing a Duraseal Crimp splice sleeve on vehicle wiring to create an effective and lasting repair.

Languages: English

AMBIENT AIR TEMP SENSOR DIAGNOSIS

S-EL06-03.01VID

This video shows a diagnosis procedure for an ambient temp sensor using the schematic to isolate the concern.

Languages: English

BATTERY MAINTENANCE AND TESTING TIPS

S-EL06-04.01VID

This video describes battery concerns due to long periods of non-use and the importance of maintenance charging, as well as tips for cold battery diagnosing, testing and charging.

Languages: English

LOCAL INTERCONNECT NETWORK DIAGNOSIS

S-EL06-05.01VID

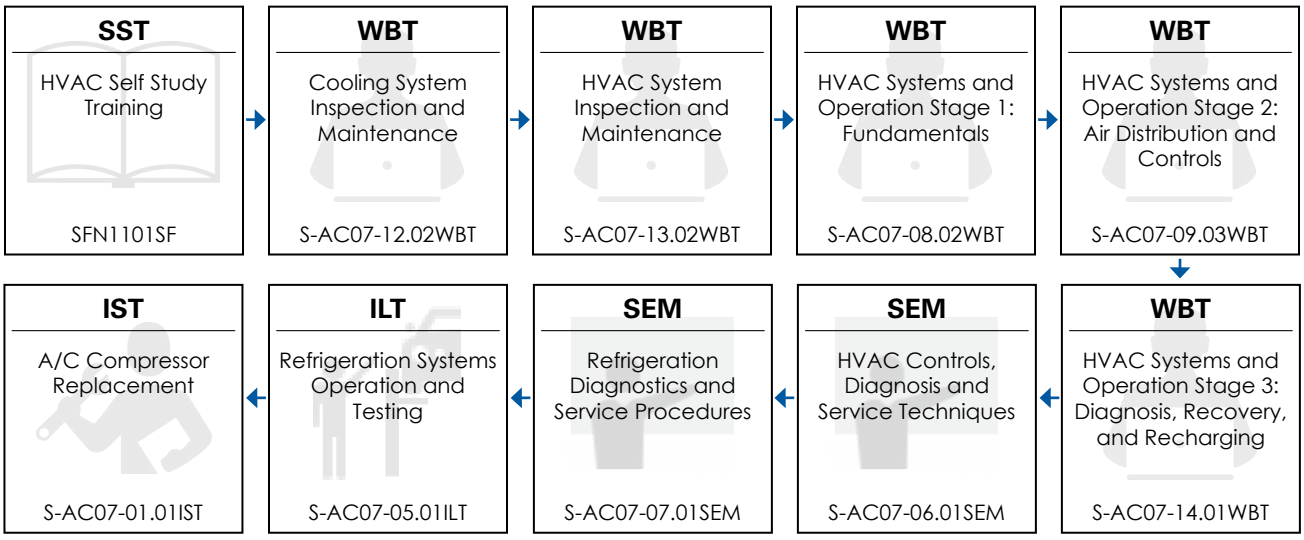
This video shows the diagnosis of the Local Interconnect Network (LIN) and how to locate module programming and setup procedures.

Languages: English

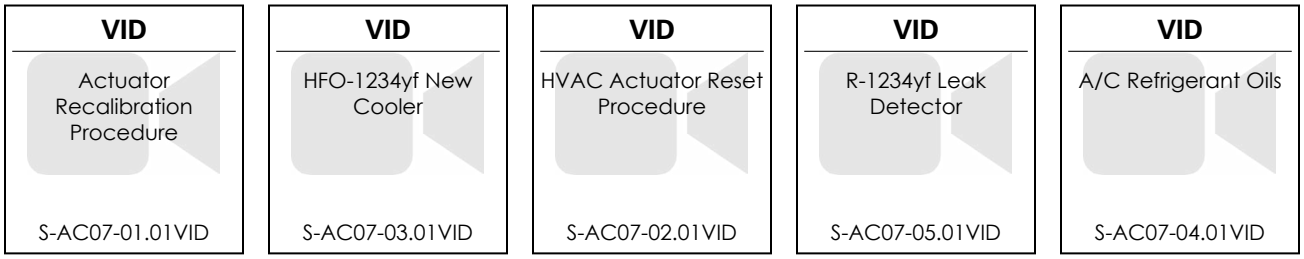
A7: HEATING AND AIR CONDITIONING

A recommended path for completing the Heating and Air Conditioning curriculum is outlined below. To complete the training below and to search for and complete additional training, visit acdelcotraining.com.

RECOMMENDED PATH



ADDITIONAL TRAINING



Self Study Training

HVAC SELF STUDY TRAINING — SFN1101SF

This self study course covers air conditioning system components, operation and service. Course topics include: air conditioning systems, air distribution systems, and HVAC service overview.

Languages: English

Web-Based Training

COOLING SYSTEM INSPECTION AND MAINTENANCE — S-AC07-12.02WBT

This course covers the inspection and maintenance of the accessory drive belt, including the replacement of the drive belt and tensioner. This course also covers the inspection and maintenance of the radiator and coolant hoses, including pressure testing and documenting the findings on a work order.

Languages: English

HVAC SYSTEM INSPECTION AND MAINTENANCE — S-AC07-13.02WBT

This course presents an overview of a vehicle's Heating, Ventilation, and Air Conditioning (HVAC) system, including components and operation, and then covers the basic procedures for the inspection and maintenance of an HVAC system. The course also covers relevant aspects of the inspection of HVAC systems in a hybrid vehicle.

Languages: English

HVAC SYSTEMS AND OPERATION STAGE 1: FUNDAMENTALS — S-AC07-08.02WBT

This course provides the fundamentals of Heating, Ventilation, and Air Conditioning (HVAC) systems. It covers the theory, characteristics, and operation of air conditioning systems. This course provides an overview of the function and operation of HVAC components. It provides information about the various types of compressors, along with the operation of the piston-type and scroll-type compressor. This course also covers the characteristics of refrigerants and the operation of fixed orifice systems. Upon completion of this course, participants will be able to recall HVAC system characteristics, recall HVAC theory, identify refrigerant systems, and identify refrigerant system components.

Languages: English/French

HVAC SYSTEMS AND OPERATION STAGE 2: AIR DISTRIBUTION AND CONTROLS — S-AC07-09.03WBT

This course covers Heating, Ventilation, and Air Conditioning (HVAC) system distribution fundamentals, along with manual and automatic control functions. Upon completion of this course, participants will be able to explain air distribution fundamentals and describe manual and automatic control functions.

Languages: English/French

HVAC SYSTEMS AND OPERATION STAGE 3: DIAGNOSIS, RECOVERY, AND RECHARGING — S-AC07-14.01WBT

This course covers Heating, Ventilation and Air Conditioning (HVAC) system servicing, including performance diagnosis and recovery and recharging station functions. Upon completion of this course, participants will be able to describe the basic precautions and tools required for servicing HVAC systems. Describe air conditioning performance diagnosis, and explain recovery and recharging station functions.

Languages: English/French

Instructor-Led Training

REFRIGERATION SYSTEMS OPERATION AND TESTING — S-AC07-05.01ILT

This full day Instructor-Led Training (ILT) course will provide technicians with the foundational knowledge of Air Conditioning (A/C) system operation required to effectively service, diagnose and repair R-134a and R-1234yf based A/C systems. The operation, computerized control and common failures will be discussed from the point of view of system diagnostics and servicing. The goal is to teach service procedures that result in maximum A/C system efficiency. The following components will be covered in detail: variable displacement compressors, electrically driven compressors, expansion valves, Internal Heat Exchangers (IHX), enhanced evaporators and condensers. Hands-on exercises will emphasize proper use of the tools and equipment while performing common service scenarios and diagnostics.

Languages: English

A7: HEATING AND AIR CONDITIONING

Seminar

HVAC CONTROLS, DIAGNOSIS AND SERVICE TECHNIQUES

S-AC07-06.01SEM (IN-PERSON)
S-AC07-06.01VS (VIRTUAL)

This seminar will provide technicians with the diagnostic techniques and strategies required to diagnose non-refrigerant related issues with the HVAC electronic controls that impact electronically regulated compressor operation and the air delivery system. Specific components and systems covered include: HVAC control inputs, condenser and blower motor fan controls and operation, manual, electronic and automatic temperature control and electronic mode door actuators and their control of air delivery and airflow in single and multiple zone adjustable systems. Setup procedures for all related modules will be reviewed. This course will include simulated diagnostic exercises to apply the principles learned.

Languages: English

REFRIGERATION DIAGNOSTICS AND SERVICE PROCEDURES

S-AC07-07.01SEM (IN-PERSON)
S-AC07-07.01VS (VIRTUAL)

Designed for technicians with prior understanding of the refrigerant cycle and system operation, this seminar will provide technicians with techniques and strategies required to isolate the root cause and perform repairs of failures in R-134a and R-1234yf equipped Air Conditioning (AC) systems. The use of pressure-temperature and humidity readings as a diagnostic aide will be the foundation of the course. Specific component diagnosis includes variable displacement compressors, electrically driven compressors, expansion valves, Internal Heat Exchangers (IHX), enhanced evaporators and condensers. This course will include simulated diagnostic exercises to apply the principles learned.

Languages: English

InShop Training

A/C COMPRESSOR REPLACEMENT

S-AC07-01.01IST (IN-PERSON)
S-AC07-01.01VI (VIRTUAL)

This 1-hour InShop will cover important tips and procedures for replacing A/C compressors to ensure a long service life. Topics include: system contamination and flushing procedures, and the selection of correct refrigerant oil.

Languages: English

TechTube Videos

ACTUATOR RECALIBRATION PROCEDURE

S-AC07-01.01VID

This short video will demonstrate how to perform an HVAC actuator recalibration on some GM vehicles.

Languages: English

HVAC ACTUATOR RESET PROCEDURE

S-AC07-02.01VID

This short video will demonstrate how to get an HVAC actuator back in range if it has been run out of its set points.

Languages: English

HFO-1234YF NEW COOLER

S-AC07-03.01VID

This video will share some information about a new A/C refrigerant (R-1234yf) that will be in your shop soon if you haven't already seen it.

Languages: English

A/C REFRIGERANT OILS

S-AC07-04.01VID

This video looks at A/C refrigerant oils and concerns to be aware of, including, why A/C mineral oil 525 should be used to lubricate A/C system o-rings to prevent corrosion of connections.

Languages: English

R-1234YF LEAK DETECTOR

S-AC07-05.01VID

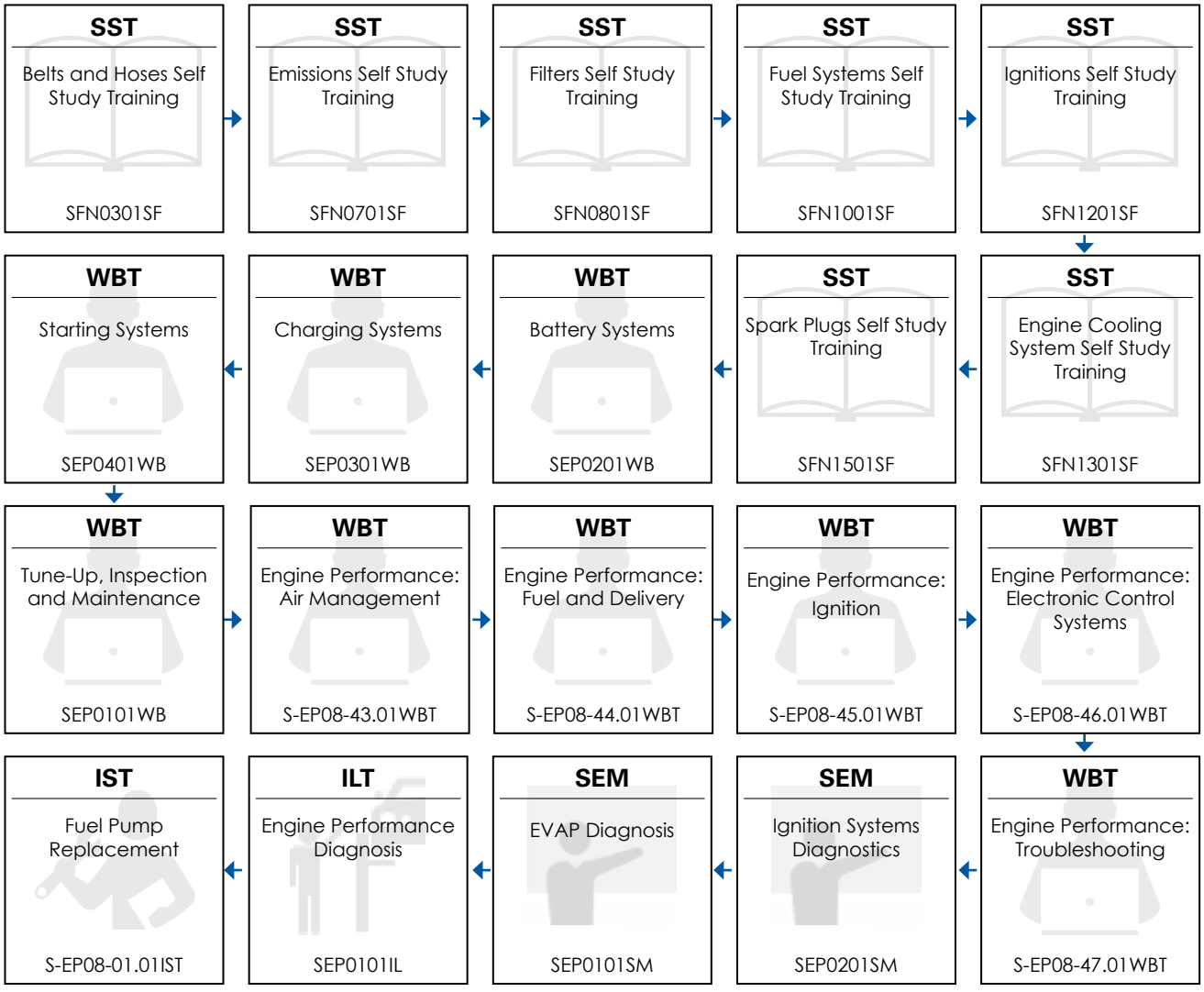
This video shows how to use the R-1234yf leak detector and why you should not use a detector that is not rated for R-1234yf.

Languages: English

A8: ENGINE PERFORMANCE

A recommended path for completing the Engine Performance curriculum is outlined below. To complete the training below and to search for and complete additional training, visit acdelcotraining.com.

RECOMMENDED PATH



A8: ENGINE PERFORMANCE

Self Study Training

BELTS AND HOSES SELF STUDY TRAINING — SFN0301SF

An explanation of popular automotive belts and hoses design. Includes multi-ribbed serpentine belts, V-belts and engine timing belts. Molded radiator and bypass hoses along with fuel-resistant and specialty hoses will be covered. Hybrid vehicle information as it relates to belts is also explored.

Languages: English

EMISSIONS SELF STUDY TRAINING — SFN0701SF

An explanation of popular automotive emission systems. Includes EVAP Systems, catalytic converters, PCV Valves, air injection systems, secondary air pumps and EGR Valves.

Languages: English

FILTERS SELF STUDY TRAINING — SFN0801SF

An explanation of popular automotive filter designs. Includes construction, identification, and replacement information for air, oil, fuel, transmission, coolant and cabin air filters.

Languages: English

FUEL SYSTEMS SELF STUDY TRAINING — SFN1001SF

An explanation of popular automotive fuel systems. Includes fuel injectors, regulators, Multiport Fuel Injection (MFI) systems and Spark Plug Ignited Direct Injection (SIDI) components.

Languages: English

IGNITIONS SELF STUDY TRAINING — SFN1201SF

An explanation of popular automotive ignition systems and high voltage delivery system designs. Includes coils, spark plug wires, spark plugs, primary and secondary circuit components, distributor and distributorless systems.

Languages: English

ENGINE COOLING SYSTEM SELF STUDY TRAINING — SFN1301SF

An explanation of popular automotive cooling system designs. Includes water pumps, radiators, coolants, chemicals, hoses and heater cores. Hybrid vehicle information as it relates to engine cooling system is also explored.

Languages: English

SPARK PLUGS SELF STUDY TRAINING — SFN1501SF

An explanation of popular automotive spark plugs and design. Conventional tip, extended tip, RAPIDFire Platinum, and heat ranges are presented.

Languages: English

Web-Based Training

TUNE-UP, INSPECTION AND MAINTENANCE — SEP0101WB

This WBT provides the general and specific inspection and maintenance procedures for tune ups. The technician will learn how to inspect and identify specific components involved in a tune up. Upon completion of this course, service technicians will be able to identify the types and condition of spark plugs, identify wire inspection procedures, identify the types of coil packs, identify the location of cylinder number 1, and identify the replacement procedures for tune up components.

Languages: English

BATTERY SYSTEMS — SEP0201WB

This course covers the basics of battery operation and service. Upon completion of this course, participants will be able to identify battery characteristics, recall battery operation, identify battery inspection and testing procedures, and recognize battery service procedures.

Languages: English/French

CHARGING SYSTEMS — SEP0301WB

This course covers the basics of charging system operation and service. Upon completion of this course, participants will be able to identify charging system components and characteristics, recall the operation of the electrical power management system, recall the operation of the generator, and recall how to perform charging system diagnostics.

Languages: English/French

STARTING SYSTEMS

SEP0401WB

This course covers the basics of starting systems. Upon completion of this course, participants will be able to identify starting system characteristics and recall how to perform starting system diagnostics.

Languages: English/French

BI-FUEL SYSTEM OPERATION

S-EP08-29.01WBT

General Motors bi-fuel systems use a combination of Compressed Natural Gas (CNG) fuel and traditional gasoline systems. This course covers the process of how the bi-fuel system operates and performs in comparison to a traditional gasoline vehicle. It also identifies components involved in bi-fuel system operation and bi-fuel supply operations. Bi-fuel diagnostic scenarios for no start and improper CNG operation will be discussed. In addition to diagnostics, the bi-fuel inspection and maintenance process including leak checking and tank removal safety will be presented. Vehicle storage will also be covered. Upon completion of this course, participants will be able to describe the bi-fuel system components and operation, describe bi-fuel system diagnostic procedures, and recall bi-fuel system inspection and maintenance procedures.

Languages: English

ENGINE PERFORMANCE: AIR MANAGEMENT

S-EP08-43.01WBT

This course covers the fundamentals of engine performance, including the internal combustion process, air induction, fuel supply, and the exhaust system. The focus is on air management in relation to the internal combustion engine. Topics include atmospheric pressure, volumetric efficiency, components of induction systems, electronic throttle operation, and airflow diagnostics. Upon completion of this course, participants will be able to describe the principles of internal combustion engines and the air management system, including the underlying science, components, electronic throttle control, and intake flow rationality diagnostics.

Languages: English/French

ENGINE PERFORMANCE: FUEL AND DELIVERY

S-EP08-44.01WBT

This course covers the theory and characteristics of fuel management systems in GM vehicles, including the operation of sequential port fuel injection and spark-ignited direct injection. Upon completion of this course, participants will be able to identify the theory, characteristics, and operation of different types of fuel management systems.

Languages: English/French

ENGINE PERFORMANCE: IGNITION

S-EP08-45.01WBT

This course presents the characteristics of ignition systems, including the different sections and their functions. Topics cover the operation of the coil-near-plug and coil-on-plug ignition systems. Upon completion of this course, participants will be able to identify basic characteristics of ignition systems, as well as the crankshaft position variation learn procedure.

Languages: English/French

ENGINE PERFORMANCE: ELECTRONIC CONTROL SYSTEMS

S-EP08-46.01WBT

This course presents the electronic control systems in GM vehicles in relation to engine performance. Topics include: the function of the engine control module, modes of operation, the fundamentals of emission control systems, characteristics of Onboard Diagnostics II (OBD-II), the diagnostics of engine off natural vacuum, the operation of positive crankcase ventilation, and monitoring techniques for emission control systems. Upon completion of this course, participants will be able to describe the characteristics of electronic control systems and emission control systems, along with the techniques for monitoring emission control systems.

Languages: English/French

ENGINE PERFORMANCE: TROUBLESHOOTING

S-EP08-47.01WBT

This course presents engine performance troubleshooting using strategy-based diagnostics. Topics cover how to diagnose engine performance using external visual inspection, system-based strategy, diagnosis based on Diagnostic Trouble Codes (DTCs), and misfire monitoring. The course also provides information about how to diagnose engine performance support systems, including the air conditioning clutch, communications, cooling fan, cruise control, active fuel management, cam phaser, and enhanced electronic pedal override. Upon completion of this course, participants will be able to describe how to troubleshoot and diagnose engine performance concerns, and how to diagnose engine performance support systems.

Languages: English

BI-FUEL SYSTEM OPERATION FOR RPO LFR/FHV

S-EP08-85.01WBT

General Motors bi-fuel systems use a combination of Compressed Natural Gas (CNG) fuel and traditional gasoline systems. This course covers bi-fuel system components, operation, and diagnostics and repair for the RPO LFR / FHV system. It describes how the bi-fuel system operates and performs in comparison to a traditional gasoline vehicle. This course also identifies components involved in bi-fuel system operation and supply, as well as some common diagnostic and service procedures.

Languages: English

A8: ENGINE PERFORMANCE

Instructor-Led Training

ENGINE PERFORMANCE DIAGNOSIS — SEP0101IL

This course focuses on failure modes that contribute most often to misfire and no-start engine performance concerns. Lessons are sequenced in priority order, from issues with the highest fault potential, to systems with the lowest fault potential. This course uses real world scenarios based on vehicles from several manufacturers to focus on various failure modes and related diagnostic procedures.

Languages: English

Seminars

IGNITION SYSTEMS DIAGNOSTICS — SEP0201SM (IN-PERSON) SEP0201VS (VIRTUAL)

Diagnosing ignition system misfires can be a difficult task, especially when the concern is intermittent. This seminar will improve the technician's ability to identify the root cause of ignition systems faults. Ignition system components including: crank and cam sensors, knock sensors, coils, spark plugs and spark plug wires, computer controlled ignition timing and spark delivery strategies from multiple automobile manufacturers will be covered. Cylinder misfire detection and diagnostic strategies, known malfunctions, real-world case studies and diagnostic exercises will be presented.

Languages: English

EVAP DIAGNOSIS — SEP0101SM (IN-PERSON) SEP0101VS (VIRTUAL)

This seminar will provide an overview of evaporative emissions and the systems that control them. Topics include the function of the fuel tank ventilation system, charcoal canister, purge and vent valves, fuel tank pressure sensors, Leak Detection Pumps (LDP) and other components. We will discuss the strategies and function of Onboard Refueling Vapor Recovery (ORVR), Engine Off Natural Vacuum (EONV), including the diagnosis of P0440, P0442 and other EVAP system DTCs.

Languages: English

InShop Training

FUEL PUMP REPLACEMENT — S-EP08-01.01IST (IN-PERSON) S-EP08-01.01VI (VIRTUAL)

This 1-hour InShop will cover important tips and procedures for servicing electric in-tank fuel pumps. Topics include: fuel tank inspection, importance of a clean tank, installation tips and servicing the electrical connector (pigtail).

Languages: English

TechTube Videos

FUEL PUMP ELECTRICAL CONNECTOR — S-EP08-01.01VID

This video will point out some important information on how to install and seal the electrical connector (sometimes referred to as an electrical harness pigtail) that is included with some ACDelco fuel pumps.

Languages: English

MECHANICAL HIGH PRESSURE FUEL PUMP REPLACEMENT — S-EP08-02.01VID

This video demonstrates how to service the high pressure direct injection fuel pump on the Gen V V8 using SI procedures and special tools.

Languages: English

3.6 HI PRESSURE FUEL PUMP REPLACEMENT — S-EP08-04.01VID

This video demonstrates the proper procedure to remove and install the high pressure fuel pump on a 3.6L LLT SIDI engine.

Languages: English

P0420/P0430 DIAGNOSIS — S-EP08-05.01VID

This video describes conditions to be aware of when diagnosing a P0420/P0430 catalytic converter efficiency code.

Languages: English

DIESEL EXHAUST TREATMENT STAGE 1 — S-EP08-06.01VID

This video describes the operation of the diesel exhaust aftertreatment system for Duramax engines focusing on the Diesel Oxidation Catalyst (DOC).

Languages: English

DIESEL EXHAUST TREATMENT STAGE 2 — S-EP08-07.01VID

This video describes the operation of the diesel exhaust aftertreatment system for Duramax engines focusing on diesel exhaust fluid and the selective catalyst reduction.

Languages: English

DIESEL EXHAUST TREATMENT STAGE 3 — S-EP08-08.01VID

This video describes the operation of the diesel exhaust aftertreatment system for Duramax engines focusing on the diesel particulate filter.

Languages: English

THROTTLE BODY REPLACEMENT — S-EP08-09.01VID

This video describes how to perform the idle learn reset procedure after replacing a throttle body for GM trucks 2007 and newer, SUVs 2008 and newer with a V-8 engine.

Languages: English

3.0L LF1 HFV6 FUEL RAIL AND INJECTOR REPLACEMENT — S-EP08-10.01VID

This video identifies important differences from early design 3.0L LF1 cylinder heads, where the head needs to be removed before removing the fuel rails.

Languages: English

EVAP FLOW TEST AND SMOKE TEST — S-EP08-11.01VID

This video shows the operation of the Evaporative Emission System Tester (EEST) for flow and smoke testing.

Languages: English

GASKETS AND INTAKE MANIFOLDS — S-EP08-12.01VID

This video demonstrates best practices for preparing surfaces for gasket replacement and features of ACDelco gaskets, gaskets sets and intake manifolds.

Languages: English

IGNITION SYSTEM TESTING — S-EP08-13.01VID

This video shows how to perform ignition system testing using a digital multimeter and a spark tester.

Languages: English

P0128 DIAGNOSIS AND REPAIR — S-EP08-14.01VID

This video looks at DTC P0128 Engine Coolant Temperature Below Thermostat Regulating Temperature, how to diagnose and repair.

Languages: English

PROPER IGNITION COIL REMOVAL — S-EP08-15.01VID

This video shows the proper procedure to remove ignition system coils without damaging them, on GM 1.4, 1.6 or 1.8 liter engines using T-handles or bolts.

Languages: English

FUEL PUMP CONNECTOR REPLACEMENT — S-EP08-18.01VID

This video will demonstrate how to properly clean the inside of a fuel tank when replacing an in tank fuel pump. The focus will be on ensuring debris from the failed pump does not contaminate the new component.

Languages: English

FUEL TANK CLEANING — S-EP08-19.01VID

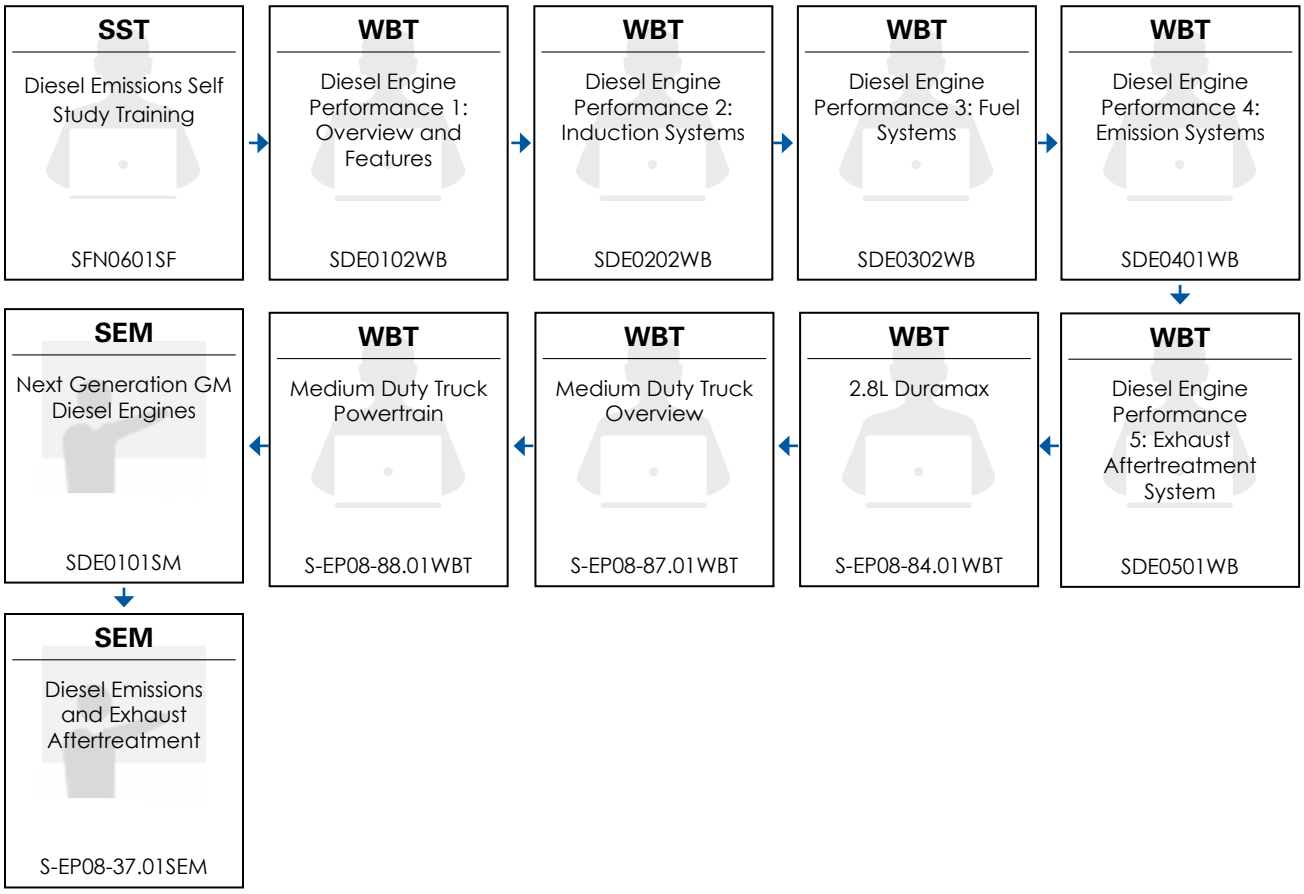
This video will demonstrate the proper way to install the updated fuel pump connector that is required with some ACDelco replacement fuel pumps. This procedure can be used with other ACDelco replacement pigtails.

Languages: English

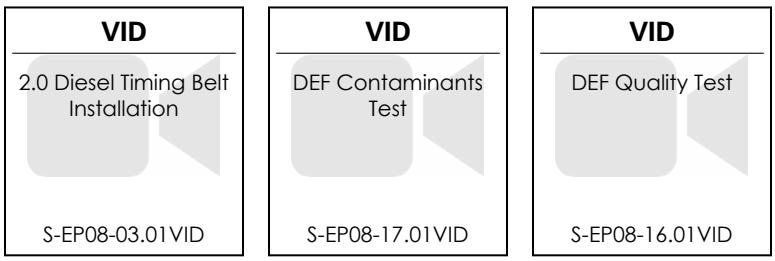
A9: LIGHT DUTY DIESEL

A recommended path for completing the Light Duty Diesel curriculum is outlined below. To complete the training below and to search for and complete additional training, visit acdelcotraining.com.

RECOMMENDED PATH



ADDITIONAL TRAINING



Self Study Training

DIESEL EMISSIONS SELF STUDY TRAINING — SFN0601SF

This self study course covers diesel gas emissions and the technology employed to reduce the exhaust emissions to comply with environmental regulations. Topics will include the function of diesel emission controls, symptoms of malfunctions, and basic maintenance and service checks.

Languages: English

Web-Based Training

DIESEL ENGINE PERFORMANCE 1: OVERVIEW AND FEATURES — SDE0102WB

This course introduces diesel engine principles and operation, including diesel engine features and control systems. Upon completion of this course, participants will be able to recall diesel engine operating principles, diesel engine features, and diesel engine control systems.

Languages: English/French

DIESEL ENGINE PERFORMANCE 2: INDUCTION SYSTEMS — SDE0202WB

This course covers the diesel engine induction system, including induction system components, turbochargers, and exhaust gas recirculation. Upon completion of this course, participants will be able to describe the diesel engine induction system, diesel engine turbochargers, and identify characteristics of diesel exhaust gas recirculation.

Languages: English/French

DIESEL ENGINE PERFORMANCE 3: FUEL SYSTEMS — SDE0302WB

This course covers the diesel engine fuel supply, including fuel supply types, components, fuel conditioning, and operation. It also covers diesel engine fuel injection types. In addition, this course describes fuel return components and fuel system testing. Upon completion of this course, participants will be able to recall the diesel engine fuel supply, diesel engine high pressure fuel injection, and diesel engine fuel system testing procedures. They will be able to identify the diesel engine fuel return system.

Languages: English/French

DIESEL ENGINE PERFORMANCE 4: EMISSIONS SYSTEMS — SDE0401WB

This course covers the diesel engine's aftertreatment emission system as well as crankcase ventilation systems.

Upon completion of this course, technicians will be able to identify the components and configurations of the diesel engine's aftertreatment emission system. Identify the regeneration process of the diesel emission aftertreatment system. Recall methods of diagnosing the diesel emission system, and recognize components and configurations of the crankcase ventilation system.

Languages: English/French

DIESEL ENGINE PERFORMANCE 5: EXHAUST AFTERTREATMENT SYSTEMS — SDE0501WB

This course covers the diesel exhaust aftertreatment system, including aftertreatment components and operation. It also covers the diesel exhaust fluid systems, Selective Catalytic Reduction (SCR) operation, and service considerations. Upon completion of this course, participants will be able to recall correct diesel exhaust fluid handling procedures. Identify reductant systems and components. Recall the selective catalytic reduction aftertreatment operation and service considerations.

Languages: English/French

DIESEL ENGINE PERFORMANCE 6: EXHAUST GAS RECIRCULATION SYSTEMS — SDE1101WB

This course covers the overview, operation, and diagnosis of the Cylinder Set Strategy (CSS) diesel engine Exhaust Gas Recirculation (EGR) system. Upon completing this course, participants will be able to: recall the purpose and components of the CSS diesel engine Exhaust Gas Recirculation system, identify the stages of operation of the CSS diesel engine Exhaust Gas Recirculation system, and identify diagnostic strategies for the CSS diesel engine Exhaust Gas Recirculation system.

Languages: English

2.8L DURAMAX — S-EP08-84.01WBT

This WBT course presents a description of the 2.8L Duramax diesel engine. The course provides a description of the engine's applications and specifications. Other topics are a comprehensive overview of components of the 2.8L diesel engine, and its aftertreatment system. Upon completion of this course, technicians will be able to identify applications of the 2.8L diesel engine, identify features of the 2.8L diesel engine, identify components of the 2.8L diesel engine, identify service procedures for the 2.8L diesel engine, and identify the aftertreatment system of the 2.8L diesel engine.

Languages: English

A9: LIGHT DUTY DIESEL

MEDIUM DUTY TRUCK OVERVIEW — S-EP08-87.01WBT

This WBT course is an overview of the new medium duty truck and covers the exterior features, HVAC, power and signal distribution, entertainment, body systems, safety and security, suspension, steering and brakes. Topics include specifications, options, operation, and procedures. Upon completion of this course, technicians will be able to describe the new / updated aspects of the specifications features, describe the new / updated aspects of the HVAC, power and signal, and drivers information and entertainment system, describe the new / updated aspects of the body systems, safety and security, and describe the new / updated aspects of the suspension, steering, brakes and maintenance.

Languages: English

MEDIUM DUTY TRUCK POWERTRAIN — S-EP08-88.01WBT

This WBT course presents an overview of the powertrain systems found on GM's medium duty trucks. Topics cover the applicable medium duty diesel engines, the diesel exhaust treatment, and the driveline systems as well as service considerations. Upon completion of this course, technicians will be able to recognize the components of the engines in the medium duty truck, recognize the characteristics of the diesel exhaust treatment system in the medium duty truck, and recognize the driveline systems in the medium duty truck.

Languages: English

Seminar

NEXT GENERATION GM DIESEL ENGINES — SDE0101SM (IN-PERSON) SDE0101VS (VIRTUAL)

This course prepares technicians to diagnose and service the new generation of diesel engines from General Motors, including the 1.6L offered in the Chevrolet Cruze, the 2.8L offered in the Chevrolet Colorado and GMC Canyon, and the 6.6L offered in the Chevrolet Silverado and GMC Sierra. Topics will include unique features, maintenance procedures, documented service concerns, and special service tools for each next generation diesel engine covered.

Languages: English

DIESEL EMISSIONS AND EXHAUST AFTERTREATMENT — S-EP08-37.01SEM (IN-PERSON) S-EP08-37.01VS (VIRTUAL)

Modern diesel engines are subject to increasingly stringent emission regulations and monitoring requirements. This seminar will prepare technicians to effectively diagnose and repair diesel exhaust emission reduction failures by developing an understanding of the emissions created by diesel engines and the systems designed to reduce those emissions. Both pre- and aftertreatment systems will be covered. Specific systems and components will include intake air swirl and heating, glow plugs, exhaust gas recirculation, oxidation catalysts, diesel particulate filtration, NOx reduction technologies, selective catalyst reduction, and diesel exhaust fluid. Technicians will strengthen their diagnostic techniques by focusing on the conditions used by the Engine Control Module (ECM) to set codes related to these systems, developing an understanding of how false codes could be set, and determining the root cause of any code or failure. Common failures will be covered.

Languages: English

TechTube Videos

2.0 DIESEL TIMING BELT INSTALLATION — S-EP08-03.01VID

This video demonstrates how to service the timing belt on the 2.0L diesel engine.

Languages: English

DEF QUALITY TEST — S-EP08-16.01VID

This video shows how to perform the DEF quality test as directed by service information.

Languages: English

DEF CONTAMINANTS TEST — S-EP08-17.01VID

This video shows how to perform a DEF contaminants test using a refractometer.

Languages: English

L3: ALTERNATIVE PROPULSION

A recommended path for completing the Alternative Propulsion curriculum is outlined below. To complete the training below and to search for and complete additional training, visit acdelcotraining.com.

RECOMMENDED PATH

WBT
High Voltage Systems Safety
SAP0101WB

→

WBT
Introduction to Hybrid and Electric Vehicles
SAP0201WB

→

WBT
High Voltage Power Electronics Fundamentals
SAP0301WB

→

WBT
High Voltage Battery Systems Fundamentals
SAP0401WB

→

SEM
Hybrid Vehicle Maintenance Procedures
SAP0101SM

↓

SEM
Hybrid and Electric Vehicle Operation, Diagnosis, and Repair
SAP0201SM

Gen 1 Volt and Gen 2 Volt

WBT
Extended Range Electric Vehicle: Introduction - Gen 1 Chevrolet Volt
SEL1101WB

WBT
Extended Range Electric Vehicle: Introduction - Gen 1 Cadillac ELR
SEL1201WB

WBT
Extended Range Electric Vehicle: High Voltage Disable Procedure - Gen 1 Volt/ELR
SEL1301WB

WBT
High Voltage Battery: Overview 1 - Gen 1 Volt/ELR
SEL1401WB

WBT
High Voltage Battery: Overview 2 - Gen 1 Volt/ELR
SEL1501WB

WBT
High Voltage Power Electronics: Overview - Gen 1 Volt/ELR
SEL1601WB

WBT
Electric Transmission: 4ET50 Overview - Volt/ELR (EREV)
SEL1701WB

WBT
Extended Range Electric Vehicle: Supporting Systems 1 - Gen 1 Volt/ELR
SEL1801WB

WBT
Extended Range Electric Vehicle: Supporting Systems 2 - Gen 1 Volt/ELR
SEL1901WB

WBT
Extended Range Electric Vehicle: Introduction - Gen 2 Chevrolet Volt
SEL2001WB

WBT
High Voltage Battery: Overview - Gen 2 Volt
SEL2101WB

WBT
Electric Transmission: 5ET50 Overview - Gen 2 Volt
SEL2201WB

VOD
Electric Transmission: 1ET25 Unit Repair - Bolt EV
SAP0101V

BEV Spark

WBT
Battery Electric Vehicle: Introduction - Chevrolet Spark EV
SEL2301WB

WBT
High Voltage Battery: Gen 1 Overview - Spark EV (BEV)
SEL2401WB

WBT
High Voltage Battery: Gen 2 Overview - Spark EV (BEV)
SEL2501WB

WBT
Electric Transmission: 1ET35 Overview - Spark EV (BEV)
SEL2601WB

L3: ALTERNATIVE PROPULSION

BEV Bolt

WBT
Battery Electric Vehicle Introduction 2: Chevrolet Bolt EV
S-EL06-80.01WBT

WBT
High Voltage Battery: Overview - Bolt EV (BEV 2)
SEL2701WB

WBT
Advanced Technology Vehicle Transmission 5: Chevrolet Bolt 1ET25
S-EL06-89.01WBT

HEV Malibu

WBT
Electric Transmission: 5ET50 Overview - Malibu
SEL2801WB

WBT
Hybrid Electric Vehicle: Introduction - Chevrolet Malibu
SEL2901WB

WBT
High Voltage Battery: Overview - Malibu
SEL3001WB

PHEV CT6

WBT
Plug-in Hybrid Electric Vehicle: Introduction - Cadillac CT6
SEL3101WB

WBT
High Voltage Battery: Overview - CT6
SEL3201WB

WBT
Electric Transmission: 4EL70 Overview - CT6
SEL3301WB

eAssist – Gen 1, Gen 2 and Gen 3

WBT
eAssist System Gen 1: Introduction 1 - Buick LaCrosse/Chevrolet Malibu
SEL3401WB

WBT
eAssist System Gen 1: Introduction 2 - Buick LaCrosse/Chevrolet Malibu
SEL3501WB

WBT
High Voltage Battery: Overview - Gen 1 eAssist
SEL3601WB

WBT
eAssist System Gen 1: Safety
SEL3701WB

WBT
eAssist System Gen 2: Introduction - Chevrolet Silverado/ GMC Sierra
SEL3801WB

WBT
High Voltage Battery: Overview - Gen 2 eAssist
SEL3901WB

WBT
eAssist System Gen 3: Introduction - Buick LaCrosse/Chevrolet Malibu
SEL4001WB

WBT
High Voltage Battery: Overview - Gen 3 eAssist
SEL4101WB

Web-Based Training

HIGH VOLTAGE SYSTEM SAFETY — SAP0101WB

This course will introduce participants to the high voltage systems safety used in GM vehicles. This course focuses on hybrid safety, preparation for a safe working environment, personal protective equipment, best practices, tools, disabling high voltage systems, internal battery service, and first responder guides. Upon completion of this course, participants will be able to identify the characteristics of a high voltage system, identify the steps for preparing a safe working environment, identify personal protective equipment functions, identify three best practices for working with high voltage systems, identify high voltage systems safety tools, describe the steps on how to disable high voltage systems safely, describe the steps for internal battery service, and describe how to use the first responder guides.

Languages: English

INTRODUCTION TO HYBRID AND ELECTRIC VEHICLES — SAP0201WB

This course introduces the concept, design, and a brief history of hybrid and electric vehicle technology within General Motors. It also covers electrical energy storage, transfer, and general concepts that are commonly used in electric vehicles. In addition, this course discusses the characteristics of hybrid controls. Upon completion of this course, participants will be able to recall the background of the development of hybrid and electric vehicles, recall the characteristics of electrical energy, identify electrical energy storage, delivery, and transfer systems, and identify the characteristics of hybrid control.

Languages: English

HIGH VOLTAGE POWER ELECTRONICS FUNDAMENTALS — SAP0301WB

This course covers the features and operation of hybrid and electric vehicles. This course reviews hybrid and electric power electronic components as well as the advanced technology systems.

Languages: English

HIGH VOLTAGE BATTERY SYSTEMS FUNDAMENTALS — SAP0401WB

This course covers the features of the global hybrid and electric vehicle high voltage battery systems. It provides the fundamentals of high battery voltage construction, control modules, thermal management, contactors, manual disconnect features, chassis isolation, and safety features. Upon completing this course, participants will be able to recall the fundamentals of high voltage battery construction, recall the fundamentals of high voltage control and monitoring, and recall the fundamental safety features of high voltage batteries.

Languages: English

EXTENDED RANGE ELECTRIC VEHICLE: INTRODUCTION - GEN 1 CHEVROLET VOLT — SEL1101WB

This course introduces Extended Range Electric Vehicles (EREVs), and covers the key features, components, modes of operation, and characteristics of the electrical and charging systems. It also covers vehicle communication and high voltage interlock circuit systems, as well as the diagnostic process and safety precautions. Upon completion of this course, technicians will be able to identify the key features of extended range electric vehicles, identify the components and modes of operation, identify the characteristics of the electrical system and the types and characteristics of the vehicle communication system, identify the characteristics of the charging system, identify the characteristics of the high voltage interlock circuits, and identify the diagnostic process and safety precautions.

Languages: English/French

EXTENDED RANGE ELECTRIC VEHICLE: INTRODUCTION - GEN 1 CADILLAC ELR — SEL1201WB

This course provides an introduction to the Cadillac ELR, including exterior and interior features, characteristics, and components. Exterior features covered include driving modes, Regen on Demand, dimensions and specifications, aerodynamic features, wheels and tires, and lighting. Vehicle components covered include the high voltage battery, charging system, transmission, engine, electric power steering system, suspension system, and braking system. Interior features covered include seating, lighting, driver information center and instrument panel cluster, driver selectable modes, safety features, and the center stack display.

Upon completion of this course, technicians will be able to recall Cadillac ELR exterior and interior features, components, and characteristics.

Languages: English

EXTENDED RANGE ELECTRIC VEHICLE: HIGH VOLTAGE DISABLE PROCEDURE - GEN 1 VOLT/ELR — SEL1301WB

This course covers the step-by-step procedure to safely disable the high voltage system within an Extended Range Electric Vehicle (EREV). Upon completion of this course, technicians will be able to identify the high voltage system disable procedure.

Languages: English/French

L3: ALTERNATIVE PROPULSION

HIGH VOLTAGE BATTERY: OVERVIEW 1 - GEN 1 VOLT/ELR SEL1401WB

This course covers the high voltage energy storage system. It also covers drive motor battery characteristics and drive motor battery component characteristics. Upon completion of this course, technicians will be able to identify the characteristics and operation of the drive motor battery and identify characteristics of the drive motor battery components.

Languages: English/French

HIGH VOLTAGE BATTERY: OVERVIEW 2- GEN 1 VOLT/ELR SEL1501WB

This course covers the high voltage energy storage system. In this course, participants should be able to identify the thermal management system characteristics and operation, and the characteristics and troubleshooting process for the integrated charger. Upon completion of this course, technicians will be able to identify the characteristics and operation of the thermal management system and identify the characteristics and troubleshooting process for the high voltage battery charger.

Languages: English/French

HIGH VOLTAGE POWER ELECTRONICS: OVERVIEW - GEN 1 VOLT/ELR SEL1601WB

This course covers the power electronics found in advanced technology vehicles. It includes the correct operation of the drive motor generator power inverter module and accessory Direct Current (DC) power module, as well as the characteristics and correct operation of their thermal management systems. Upon completion of this course, technicians will be able to identify the correct operation of the drive motor generator power inverter module and thermal management system and identify the correct operation of the accessory DC power control module and thermal management system.

Languages: English/French

ELECTRIC TRANSMISSION: 4ET50 OVERVIEW - VOLT/ELR (EREV) SEL1701WB

This course covers the 4ET50 transmission including the transmission characteristics and modes of operation, mechanical and electrical system characteristics, and the fluid flow and power flow for each mode of operation. Upon completion of this course, technicians will be able to identify the characteristics and modes of operation of the 4ET50 transmission, recall mechanical and electrical system characteristics of the 4ET50 transmission, and recall the correct fluid flow and power flow for each operating mode of the 4ET50 transmission

Languages: English/French

EXTENDED RANGE ELECTRIC VEHICLE: SUPPORTING SYSTEMS 1- GEN 1 VOLT/ELR SEL1801WB

This course covers the unique characteristics of the 1.4L engine, as well as the fuel and evaporative emissions control systems including the refueling process. Upon completion of this course, technicians will be able to identify the characteristics and modes of operation of the 1.4L engine and identify the characteristics and operation of the fuel and evaporative emissions control systems.

Languages: English/French

EXTENDED RANGE ELECTRIC VEHICLE: SUPPORTING SYSTEMS 2- GEN 1 VOLT/ELR SEL1901WB

This course covers the unique characteristics of the braking system including regenerative braking capabilities and modes of operation. This course also covers the unique characteristics of the Heating, Ventilation, and Air Conditioning (HVAC) system, including the high voltage heater, electric air conditioning compressor and drive motor battery coolant cooler. Upon completion of this course, technicians will be able to identify the characteristics and operation of the braking system and identify the characteristics and operation of the heating ventilation and air conditioning system.

Languages: English/French

EXTENDED RANGE ELECTRIC VEHICLE: INTRODUCTION - GEN 2 CHEVROLET VOLT SEL2001WB

This course introduces the second generation (Gen 2) Extended Range Electric Vehicle (EREV), which includes the Chevrolet Volt. The course presents the vehicle's characteristics, components, and operation. The course also provides information on the EREV's electrical and communication systems, as well as its charging, fuel, and braking systems. Upon completion of this course, technicians will be able to identify features of the Gen 2 EREV, describe the components and modes of operation, describe the electrical and communication systems, identify characteristics of the charging system, identify characteristics of the fuel system, and identify characteristics of the braking system.

Languages: English/French

HIGH VOLTAGE BATTERY: OVERVIEW - GEN 2 VOLT SEL2101WB

This course covers the Generation 2 Extended Range Electric Vehicle (EREV) high voltage energy storage system. This content includes the drive motor battery assembly characteristics, drive motor battery components, thermal management system characteristics and operation, and diagnosis and service of the drive motor battery. Upon completion of this course, technicians will be able to recall components of the drive motor battery assembly, recall the operation of the drive motor battery, recall the operation of the thermal management system, and recall how to diagnose and service the drive motor battery.

Languages: English/French

ELECTRIC TRANSMISSION: 5ET50 OVERVIEW - GEN 2 VOLT — SEL2201WB

This course covers the 5ET50 transmission including the transmission characteristics and modes of operation, mechanical and electrical system characteristics, and the fluid flow and powerflow for each mode of operation. Upon completion of this course, technicians will be able to recognize the characteristics and modes of operation for the 5ET50 transmission, recognize the mechanical and electrical system characteristics of the 5ET50 transmission, and recognize the correct fluid flow and power flow for each operating mode of the 5ET50 transmission.

Languages: English/French

BATTERY ELECTRIC VEHICLE: INTRODUCTION - CHEVROLET SPARK EV — SEL2301WB

This course provides an introduction to the battery electric vehicle. It covers key features, characteristics, and components of high voltage vehicle systems and supporting systems. High voltage vehicle systems covered include the propulsion system, thermal management system, and the charging system. Supporting systems covered include the climate control system, electrical and vehicle communication systems, braking system, and the steering system. This course also discusses modes of operation, as well as safe work practices, the diagnostic process, and the high voltage disabling procedure. Upon completion of this course, technicians will be able to recall the key characteristics and features of the battery electric vehicle, identify characteristics and components of the battery electric vehicle high voltage systems, identify characteristics and components of the battery electric vehicle supporting systems, recall characteristics of battery electric vehicle operation, and recall battery electric vehicle service procedures.

Languages: English

HIGH VOLTAGE BATTERY: GEN 1 OVERVIEW - SPARK EV (BEV) — SEL2401WB

This course covers the battery electric vehicle high voltage energy storage system. It covers characteristics and failure modes of the drive motor battery, as well as special tools required to diagnose and service the drive motor battery. This course also covers characteristics of the lithium-ion battery modules and battery control systems, as well as operation of the contactors. Lastly, this course discusses the thermal management system, including its characteristics, components, and operation. Upon completion of this course, technicians will be able to recall the characteristics and operation of the drive motor battery, recall characteristics, components, and operation of the drive motor battery components, and recall the characteristics, components, and operation of the thermal management system.

Languages: English

HIGH VOLTAGE BATTERY: GEN 2 OVERVIEW - SPARK EV (BEV) — SEL2501WB

This WBT course provides a description of the specifications, components, configuration, connections, and function of the drive motor battery for the 2015 Spark EV (Electric Vehicle). The content of the course covers service procedures and cautions, as well as the associated parts of the drive motor battery system. Upon completion of this course, technicians will be able to identify the function and specifications of the drive motor battery, describe the components, configuration, and associated parts of the drive motor battery, and describe the service techniques and special tools associated with the drive motor battery.

Languages: English

ELECTRIC TRANSMISSION: 1ET35 OVERVIEW - SPARK EV (BEV) — SEL2601WB

This course covers the 1ET35 transmission characteristics, components, modes of operation, and service tips. The characteristics of the 1ET35 transmission include transmission cooling and fluid type. Mechanical and electrical components are also covered, as well as drive, reverse, and regenerative braking modes of operation. The service tips covered include fluid filling procedure highlights, and transmission disassembly highlights. Upon completion of this course, technicians will be able to recall characteristics and components of the 1ET35 transmission, identify modes of operation of the 1ET35 transmission, and recall service procedure tips for the 1ET35 transmission.

Languages: English

BATTERY ELECTRIC VEHICLE INTRODUCTION 2: CHEVROLET BOLT EV — S-EL06-80.01WBT

This course provides an introduction to the 2017 Bolt EV battery electric vehicle. It covers key features, characteristics, and components of high voltage vehicle systems and supporting systems. The high voltage vehicle systems covered include the propulsion system, thermal management system, and charging system. Supporting systems covered include the climate control system and the braking system. This course also discusses modes of operation and safe work practices.

Languages: English/French

HIGH VOLTAGE BATTERY: OVERVIEW - BOLT EV (BEV 2) — SEL2701WB

This course presents the high voltage energy storage systems in the latest battery electric vehicle from General Motors: the 2017 Chevrolet Bolt EV. The course covers characteristics and components of the drive motor battery, the associated thermal management system, and service procedures. Upon completion of this course, participants will be able to identify characteristics and components of the drive motor battery assembly, recall components and operation of the battery's thermal management system, and recall diagnosis and service procedures for the drive motor battery.

Languages: English

L3: ALTERNATIVE PROPULSION

ADVANCED TECHNOLOGY VEHICLE TRANSMISSION 5: CHEVROLET BOLT 1ET25 — S-EL06-89.01WBT

This WBT course provides technical information on the 1ET25 transmission, which is a key component of the electric Chevrolet Bolt. Topics included are the transmission's electrical and mechanical components, modes of operation, electronic transmission range select, and service tips. Upon completion of this course, technicians will be able to identify characteristics and mechanical components specific to the 1ET25 transmission, identify electrical components of the 1ET25 transmission, identify the transmission cooling methods, fluid type and capacity related to the 1ET25 transmission, identify modes of operation performed by the 1ET25 transmission, and identify service tips related to the 1ET25 transmission.

Languages: English/French

HYBRID ELECTRIC VEHICLE: INTRODUCTION - CHEVROLET MALIBU — SEL2901WB

This course introduces the hybrid electric vehicle system found in the Chevrolet Malibu. The course also provides information on the hybrid electric vehicle's components and modes of operation, as well as its electrical and communication systems and braking system. Upon completion of this course, participants will be able to identify the key features of the 2016 hybrid electric vehicle system, recall the components and modes of operation, describe the electrical and communication systems, and identify characteristics of the braking system.

Languages: English/French

HIGH VOLTAGE BATTERY: OVERVIEW - MALIBU — SEL3001WB

This course presents a description of the 288-volt, lithium-ion high voltage battery found in hybrid electric vehicles such as the Chevrolet Malibu. Topics cover the battery's main components, and the steps to disconnect the high voltage battery for service. Upon completion of this course, participants will be able to recognize the characteristics and components of the high voltage battery assembly.

Languages: English/French

ELECTRIC TRANSMISSION: 5ET50 OVERVIEW - MALIBU — SEL2801WB

This course presents the characteristics of the 5ET50 transmission, which is part of the hybrid electric Chevrolet Malibu. Topics cover the electrical and mechanical components of the transmission, along with its modes of operation, including the hydraulic fluid flow and mechanical power flow for each mode. Upon completion of this module, technicians will be able to recognize characteristics and operating modes of the 5ET50 transmission, mechanical and electrical system components of the 5ET50 transmission, and fluid flow and power flow for each operating mode of the 5ET50 transmission.

Languages: English/French

PLUG-IN HYBRID ELECTRIC VEHICLE: INTRODUCTION - CADILLAC CT6 — SEL3101WB

This course introduces the 2017 Cadillac CT6 plug-in hybrid electric vehicle. Topics cover characteristics and components related to the vehicle's high voltage systems and supporting systems such as climate control and braking. Upon completion of this module, technicians will be able to recognize identify key characteristics and features, recall high voltage systems, and identify supporting systems.

Languages: English/French

HIGH VOLTAGE BATTERY: OVERVIEW - CT6 — SEL3201WB

This course presents the high voltage energy storage systems in the latest Plug-in Hybrid Electric Vehicle (PHEV) from General Motors: the 2017 Cadillac CT6 PHEV. The course covers characteristics and components of the lithium-ion drive motor battery, thermal management system, and an overview of service procedures, including special tools. Upon completion of this course, technicians will be able to identify characteristics and components of the drive motor battery assembly, recall components and operation of the battery's thermal management system, and recall diagnosis and service procedures, including special tools.

Languages: English/French

ELECTRIC TRANSMISSION: 4EL70 OVERVIEW - CT6 — SEL3301WB

This course covers the features and operation of the 4EL70 transmission. Those features include: transmission specifications, components and their operation, drive modes, diagnostics, and towing methods. Upon completion of this course, technicians will be able to identify the 4EL70 transmission features and operation.

Languages: English/French

eASSIST SYSTEM GEN 1: INTRODUCTION 1 - BUICK LACROSSE/CHEVROLET MALIBU — SEL3401WB

This course covers the characteristics of the eAssist system and the impact the system has on the drive cycle. Upon completion of this course, technicians will be able to recall the characteristics of the eAssist system.

Languages: English/French

eASSIST SYSTEM GEN 2: INTRODUCTION 1 - BUICK LACROSSE/CHEVROLET MALIBU SEL3501WB

This course covers the components, operation, and servicing of the eAssist system. Components discussed include the starter generator, liquid cooling system, accessory drive belt system, high voltage battery assembly, and supporting systems. Upon completion of this course, technicians will be able to identify the components, and recall the operation and service procedures of the eAssist system.

Languages: English/French

HIGH VOLTAGE BATTERY: OVERVIEW - GEN 1 eASSIST SEL3601WB

This course covers the components, characteristics, and operation of the eAssist generator control and battery module assembly and the external cooling system. Upon completion of this course, technicians will be able to identify the eAssist generator control and battery module assembly components, recall the generator battery assembly components and characteristics, identify the generator control module characteristics and functions, and recall the battery cooling system components, characteristics, and operation.

Languages: English/French

eASSIST SYSTEM GEN 1: SAFETY SEL3701WB

This course covers high voltage safety precautions and eAssist service procedures, including the disabling and enabling procedures. Upon completion of this course, technicians will be able to identify high voltage safety and service procedures and identify the high voltage disabling and enabling procedures.

Languages: English/French

eASSIST SYSTEM GEN 2: INTRODUCTION - CHEVROLET SILVERADO/GMC SIERRA SEL3801WB

This course introduces the eAssist System and will describe the cooling systems, generator control module, and motor generator, including their operation. Upon completion of this course, technicians will be able to describe overall features, drive cycle features, and motor generator unit components and operation.

Languages: English/French

HIGH VOLTAGE BATTERY: OVERVIEW - GEN 2 eASSIST SEL3901WB

This course covers the eAssist battery storage system 2. This content includes the eAssist components and operation of the drive motor battery assembly and the operation of the thermal management system. Upon completion of this course, technicians will be able to recall the components of the generator and battery and recall the battery pack components and functions.

Languages: English/French

eASSIST SYSTEM GEN 3: INTRODUCTION- BUICK LACROSSE/CHEVROLET MALIBU SEL4001WB

This course presents the eAssist technology contained in the 2018 Buick LaCrosse. Topics include the eAssist drive cycle, the cooling system for power electronics, and the components and operation of the drive motor and the drive belt. Upon completion of this course, participants will be able to describe the eAssist technology in the 2018 Buick LaCrosse features, components, and operation.

Languages: English/French

HIGH VOLTAGE BATTERY: OVERVIEW - GEN 3 eASSIST SEL4101WB

This course covers the eAssist Battery Storage System 3. The content includes the eAssist components, the operation of the drive motor battery assembly, and the operation of the thermal management system. Upon completion of this course, technicians will be able to describe the eAssist battery system and identify the generator battery components and functions.

Languages: English/French

COMPRESSED NATURAL GAS (CNG) FUEL SYSTEMS S-EP08-23.01WBT

The WBT component provides knowledge of regulations, component function and operation, vehicles, diagnosis, service, and maintenance procedures for Compressed Natural Gas (CNG) fuel systems. Upon completion of this WBT component technicians will be able to recall laws, regulations, characteristics, and safety procedures for compressed natural gas fuel systems, describe the compressed natural gas system components and operation, identify compressed natural gas vehicles, engines and diagnostic procedures, and recall compressed natural gas inspection and maintenance procedures.

Languages: English

L3: ALTERNATIVE PROPULSION

BI-FUEL SYSTEM OPERATION — S-EP08-29.01WBT

General Motors bi-fuel systems use a combination of Compressed Natural Gas (CNG) fuel and traditional gasoline systems. This course covers the process of how the bi-fuel system operates and performs in comparison to a traditional gasoline vehicle. It also identifies components involved in bi-fuel system operation and bi-fuel supply operations. Bi-fuel diagnostic scenarios for no start and improper CNG operation will be discussed. In addition to diagnostics, the bi-fuel inspection and maintenance process including leak checking and tank removal safety will be presented. Vehicle storage will also be covered. Upon completion of this course, participants will be able to describe the bi-fuel system components and operation, describe bi-fuel system diagnostic procedures, and recall bi-fuel system inspection and maintenance procedures.

Languages: English

BATTERY ELECTRIC VEHICLE: INTRODUCTION – GMC HUMMER EV — SEL6701WB

This course covers the various components of the high voltage systems, the supporting Battery Electric Vehicle (BEV) systems, and vehicle operation of the 2022 GMC HUMMER EV.

Languages: English

HIGH VOLTAGE BATTERY: OVERVIEW – GMC HUMMER EV — SEL6801WB

This course presents an overview of the high voltage battery in the 2022 GMC HUMMER Electric Vehicle (EV). This high voltage battery is also known as the hybrid/EV battery pack. Topics include the high voltage battery's characteristics, components, thermal management, and diagnosis and service.

Languages: English

ELECTRIC DRIVE TRANSMISSION: P79/S8L OVERVIEW – GMC HUMMER EV — SEL6901WB

This course covers the front and rear electric drive transmissions of the 2022 GMC HUMMER Electric Vehicle (EV). The content covers the following topic areas: the P79 rear 2-motor electric drive transmission, S8L front 1-motor electric drive transmission, and service considerations.

Languages: English

ELECTRIC VEHICLE THERMAL MGMT SYSTEM – GMC HUMMER EV — SEL7001WB

This course describes the thermal management system of the 2022 GMC HUMMER EV, designed to support occupant comfort, energy optimization, and drive quality. The content covers the following topic areas: the EV thermal management overview, coolant system, and refrigerant system.

Languages: English

REAR WHEEL STEERING: OVERVIEW – GMC HUMMER EV — SEL7101WB

This course provides an introduction to the rear wheel steering and suspension systems of the 2022 HUMMER EV, their components, and service considerations.

Languages: English

Seminars

HYBRID VEHICLE MAINTENANCE PROCEDURES — SAP0101SM (IN-PERSON) SAP0101VS (VIRTUAL)

This course will focus on maintenance service procedures that aftermarket technicians can perform on hybrid electric vehicles. Participants will receive a high-level overview of the operation of hybrid components, related safety concerns, and serviceable systems. These include high voltage system operation, supporting systems such as HVAC and brake systems, and internal combustion engine.

Languages: English

HYBRID AND ELECTRIC VEHICLE OPERATION, DIAGNOSIS, AND REPAIR — SAP0201SM (IN-PERSON) SAP0201VS (VIRTUAL)

This Instructor-led training seminar provides an overview of hybrid and electric vehicle designs, operation, and servicing. Diagnosing and servicing Hybrid Electric Vehicles (HEV) and Battery Electric Vehicles (BEV) requires an in-depth understanding of their design and operation. This course covers the operation of HEV and BEV propulsion systems, driveline configurations, high voltage batteries, drive motors / generators, and charging systems. The course also covers HEV and BEV servicing procedures including high voltage safety, high voltage disabling / enabling, loss of isolation diagnosis, and range related conditions.

Languages: English

InShop Training

HYBRID AND ELECTRIC VEHICLE OPERATION, DIAGNOSIS, AND REPAIR

SAP0101IS (IN-PERSON)
SAP0101VI (VIRTUAL)

This Instructor-led training provides an overview of hybrid and electric vehicle designs, operation, and servicing. Diagnosing and servicing Hybrid Electric Vehicles (HEV) and Battery Electric Vehicles (BEV) requires an in-depth understanding of their design and operation. This course covers the operation of HEV and BEV propulsion systems, driveline configurations, high voltage batteries, drive motors / generators, and charging systems. The course also covers HEV and BEV servicing procedures including high voltage safety, high voltage disabling / enabling, loss of isolation diagnosis, and range related conditions.

Languages: English

TechTube Videos

ELECTRIC TRANSMISSION: 1ET25 UNIT REPAIR - BOLT EV

SAP0101V

This Service Know-How Video highlights the overhaul procedures for the 1ET25 Advanced Technology Vehicle Transmission. The video demonstrates the procedures for the disassembly and reassembly of the 1ET25 using the necessary special tools. Where procedures are similar, only representative examples will be shown. Even though the 1ET25 is less complex than most conventional transmissions, many of the disassembly and reassembly procedures and tools will be unfamiliar to transmission technicians. This video has been produced to help technicians successfully overhaul the 1ET25.

Languages: English

BODY ELECTRICAL AND COMMUNICATIONS

A recommended path for completing the Body Electrical and Communications curriculum is outlined below. To complete the training below and to search for and complete additional training, visit acdelcotraining.com.

RECOMMENDED PATH

Web-Based Training

SUPERCRUISE — SEL0102WB

This WBT provides specific information on the technologies and operation of the new GM Super Cruise driver assistance system. Upon completing this course, participants will be able to identify the purpose of the Super Cruise system, identify the technologies and components present in the Super Cruise system, recall the operation of Super Cruise system, and identify the fail-safes present for the Super Cruise system.

Languages: English/French

INFOTAINMENT SYSTEMS 1: RADIOS — SBE0101WB

This course is intended for GM dealership service technicians who will be servicing GM entertainment system components, including radios and antennas, and servicing radio frequency interference concerns. Topics discussed include different types of radio waves, how they travel, and the types of noise that affect radio reception, as well as the types of antennas, including fixed mast, glass mounted, and roof/trunk mounted, along with the procedures to test antenna reception. This course also discusses the procedures for isolating the cause of radio frequency interference, and the noise suppression devices to service radio frequency interference. Finally, this course discusses the operation and diagnosis of XM® satellite radio systems.

Languages: English/French

INFOTAINMENT SYSTEMS 2: SPEAKERS — SBE0201WB

This course is intended for GM dealership service technicians who will be servicing GM entertainment systems and components, including speakers, amplifiers, and active noise cancellation. Topics discussed include speaker characteristics and diagnosis. It also focuses on amplifier characteristics, operation, and diagnosis. Finally, this course discusses active noise cancellation operation, diagnostics, and components. Upon completing this course, participants will be able to describe the characteristics of speakers, describe the characteristics of amplifiers, and identify the characteristics of active noise cancellation.

Languages: English/French

INFOTAINMENT SYSTEMS 3: PERIPHERAL CONNECTIVITY — SBE0301WB

This course is intended for GM dealership service technicians who will be servicing GM entertainment systems and components, including Universal Serial Bus (USB) and Bluetooth® connectivity.

Languages: English/French

INFOTAINMENT SYSTEMS 4: REAR ENTERTAINMENT SYSTEMS — SBE0401WB

This course is intended for GM dealership service technicians who will be servicing GM entertainment systems and components, including mobile wireless charging and rear seat entertainment systems.

Languages: English/French

INFOTAINMENT SYSTEMS 5: HEAD-UP DISPLAY — SBE0501WB

Upon completion of this course, the participant will be able to describe the head-up Display characteristics and components.

Languages: English/French

INFOTAINMENT SYSTEMS 6: INTEGRATED CENTER STACK — SBE0601WB

This course covers the components and operation of the integrated center stack radio entertainment systems on GM vehicles. Upon completion of this course, participants will be able to recall the components and operation of the integrated center stack radio entertainment systems.

Languages: English/French

INFOTAINMENT SYSTEMS 7: NEXT GEN INFOTAINMENT & NAVIGATION SYSTEMS — SBE0701WB

This course provides an overview and description of the Next Generation Infotainment (NGI) and navigation systems in GM vehicles. This includes the operation, characteristics, and components of these systems. This course also covers the characteristics, operation, and diagnostics of the MOST® network, as well as the operation and diagnostics of the navigation systems. Upon completion of this course, participants will be able to identify the components and operation of the NGI infotainment system, recall the characteristics, operation, and diagnostics of the MOST® network, and recognize components and characteristics of the navigation radio systems.

Languages: English/French

BODY ELECTRICAL AND COMMUNICATIONS

INFOTAINMENT SYSTEMS 8: INFOTAINMENT SYSTEMS IOR, IOS, IOU, IOT — SBE0801WB

This course covers the integrated radio systems, including components, data communication, audio features, and location services. Upon completion of this course, participants will be able to recall infotainment components and modes of operation, identify various data communication methods used by the infotainment system, recall the audio components and features of the infotainment system, and recall the characteristics of the navigation system.

Languages: English/French

GM MOVEABLE ROOF SYSTEMS 1 — SBE0901WB

This course introduces the technician to the various types of moveable roofs, along with the components and operation of the electrical/motorized power-folding top. This course will cover service implications of the electrical/motorized power-folding top, as well as any implications it has for other vehicle systems.

Languages: English/French

GM MOVEABLE ROOF SYSTEMS 2 — SBE1001WB

This course covers electrical/hydraulic power-folding top systems, along with sunroofs, and how to diagnose and service them. It will identify the components of the electrical/hydraulic power-folding top and general diagnosis procedures. The course will also identify the various types of sunroofs and panoramic roofs, along with their components and operation.

Languages: English/French

Instructor-Led Training

GLOBAL ELECTRICAL OPERATIONS AND TESTING — SEL0301IL

This Instructor-led Training (ILT) course covers the properties of electricity, interpreting and using electrical schematics, advanced Digital Multimeter (DMM) usage, scan tool diagnosis tactics, and alternate test tool usage. Hands-on exercises provide opportunities for practicing skills, making measurements, interpreting test results and making diagnostic decisions.

Languages: English

MULTIPLEXED DATA BUS NETWORKS — S-EL06-05.01ILT

What do you do when the Scan Tool does not communicate? In this course, the technician will learn how networks function and how to diagnosis network problems when conventional methods don't work. The focus will be on the diagnosis of serial data failure modes in multiplex data buses. Diagnostic techniques will be applied on vehicles to help technicians develop problem solving skills. Power moding, network protocols: CAN, LIN, GMLAN, and repair methods will be covered.

Languages: English

Seminar

VEHICLE LIGHTING AND ACCESS — SEL0301SM (IN-PERSON) SEL0301VS (VIRTUAL)

This seminar covers vehicle lighting and access system component operation, diagnosis, testing and correct service practices. The discussion on vehicle lighting systems will include details on bulb monitoring, Pulse Width Modulated (PWM) lamp control, LED lighting, xenon lighting, dynamic headlight range and level control, adaptive forward lighting, laser lighting, and vehicle lighting system diagnostic strategies. Vehicle access system topics will include door lock, liftgate, and trunk release system operation and diagnostic strategies. Participants will discuss movable glass systems including power window system operation, and diagnostic strategies for door windows, back glass and sunroof systems.

Languages: English

SRS AND SAFETY SYSTEMS: KEEP THEIR RIDE SAFE INSIDE — S-ST10-01.01SEM (IN-PERSON) S-ST10-01.01VS (VIRTUAL)

This three-hour seminar covers the operation and diagnostic procedures of current Supplemental Restraint Systems (SRS) and why they are needed. Course content includes SRS sub-systems and components found on current vehicles, their function(s) and interrelated systems, such as OnStar. This course also covers the SRS safety procedures to be followed while making repairs, safe operation of a vehicle post-accident, diagnostic procedures, service tips, and special tools.

Languages: English

DIAGNOSING MULTIPLEXED DATA BUS NETWORKS

S-EL06-74.01SEM (IN-PERSON)
S-EL06-74.01VS (VIRTUAL)

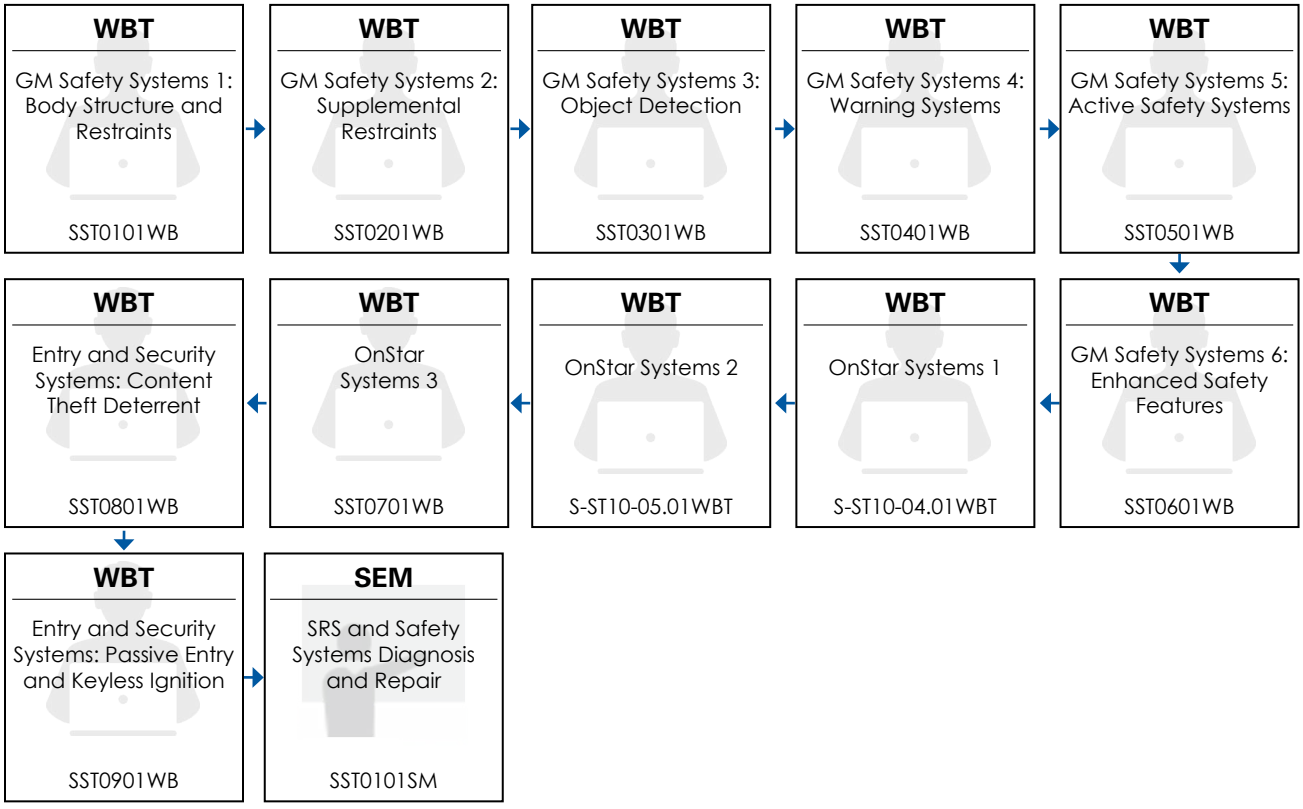
Diagnosing complex network system failures is a challenge even for experienced technicians. In this seminar, technicians will focus on diagnostic strategy to hone their problem solving skills for serial data failure modes in multiplex networks. Included network protocols: CAN, LIN, GMLAN, MOST®, and repair methods will be covered.

Languages: English

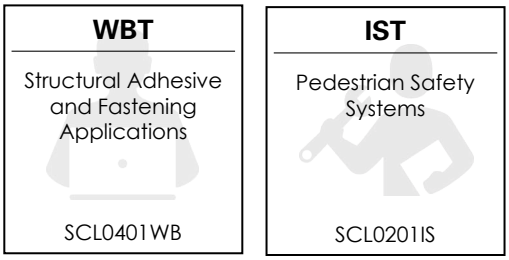
SAFETY AND SECURITY

A recommended path for completing the Safety and Security curriculum is outlined below. To complete the training below and to search for and complete additional training, visit acdelcotraining.com.

RECOMMENDED PATH



ADDITIONAL TRAINING



Web-Based Training

STRUCTURAL ADHESIVE AND FASTENING APPLICATIONS — SCL0401WB

In addition to covering structural adhesive, this course will aid in identifying self-piercing rivets, structural blind rivets, and flow drill screws, how each fastener works, and when to use the fasteners during a repair.

Languages: English/French

GM SAFETY SYSTEMS 1: BODY STRUCTURE AND RESTRAINTS — SST0101WB

This course is intended for service technicians and covers the characteristics, components, operation, and service procedures used to repair GM vehicle safety systems. It covers the overall construction of the vehicle body structure, seat belts and restraints, and child restraint systems.

Languages: English/French

GM SAFETY SYSTEMS 2: SUPPLEMENTAL RESTRAINTS — SST0201WB

This course is intended to assist GM service technicians who will be servicing GM vehicle supplemental restraint systems. It covers GM vehicle supplemental restraints that include sub-systems such as airbags, supplemental restraint system components, functions, operation, diagnostics, repair, service, and post-repair considerations.

Languages: English/French

GM SAFETY SYSTEMS 3: OBJECT DETECTION — SST0301WB

Upon completion of this course, participants will be able to identify characteristics and operation of the GM vehicle ultrasonic object detection system and characteristics and operation of the GM vehicle radar-based object detection system.

Languages: English/French

GM SAFETY SYSTEMS 4: WARNING SYSTEMS — SST0401WB

This course covers GM vehicle warning systems, especially those using vehicle-mounted cameras.

Languages: English/French

GM SAFETY SYSTEMS 5: ACTIVE SAFETY SYSTEMS — SST0501WB

This course covers GM vehicle active safety systems, including the features, diagnostic strategies, and service procedures of active safety systems.

Languages: English/French

GM SAFETY SYSTEMS 6: ENHANCED SAFETY FEATURES — SST0601WB

This course covers the enhanced safety systems of the electronic pedal override, Teen Driver, and advanced trailering.

Languages: English/French

ENTRY AND SECURITY SYSTEMS: CONTENT THEFT DETERRENT — SST0801WB

This course covers the characteristics, components, and operation of Active keyless entry and security systems, including content theft deterrent systems. Upon completion of this course, participants will be able to identify the characteristics, components, and operation of keyless entry and security systems, identify the characteristics, components, and operation of content theft deterrent systems, and recall the diagnostic strategies and service considerations for keyless entry and security systems.

Languages: English/French

ENTRY AND SECURITY SYSTEMS: PASSIVE ENTRY AND KEYLESS IGNITION — SST0901WB

This course covers the characteristics, components, and operation of Active keyless entry and security systems, including content theft deterrent systems. Upon completion of this course, participants will be able to identify the characteristics, components, and operation of keyless entry and security systems and identify the characteristics, components, and operation of content theft deterrent systems.

Languages: English/French

ONSTAR SYSTEMS 1 — S-ST10-04.01WBT

This WBT course provides a description of the OnStar systems including generations 6 through 9. The many features of OnStar are described. The course also provides detailed information about the OnStar components, as well as information on GPS and cellular technology. Upon completion of this course, technicians will be able to identify the various features of OnStar, identify the components of OnStar, and identify aspects and diagnostics of cellular and GPS technology.

Languages: English/French

SAFETY AND SECURITY

ONSTAR SYSTEMS 2 — S-ST10-05.01WBT

This WBT course provides a description of the generation 10 OnStar system. The characteristics of various features are described, including antennas and other components, Wi-Fi and aspects of connectivity, as well as warnings and diagnostics. Upon completion of this course, participants will be able to describe the characteristics of OnStar generation 10, identify the antennas and other components of OnStar, and describe OnStar generation 10 diagnostics and programming.

Languages: English/French

ONSTAR SYSTEMS 3 — SST0701WB

This course provides a description of the Gen 11 OnStar system. The characteristics of various features are described in this course, including antennas and other components, Wi-Fi and aspects of connectivity, and warnings and diagnostics. Upon completing this course, participants will be able to: describe the characteristics of OnStar Gen 11, identify the OnStar Gen 11 components, describe the OnStar Gen 11 diagnostics.

Languages: English

VEHICLE ROLLOVER PROTECTION SYSTEM — S-ST10-07.01WBT

This WBT course presents a description of the vehicle rollover protection system. Topics cover the system components, operation and service considerations.

Languages: English

VEHICLE NETWORK SECURITY — S-ST10-08.01WBT

This WBT course covers the characteristics of General Motors Local Area Network (GMLAN) network security. Topics include identifying isolated networks, how the Serial Data Gateway Module manages network traffic, and how isolated network faults are identified.

Languages: English/French

Seminar

SRS AND SAFETY SYSTEMS DIAGNOSIS AND REPAIR — SST0101SM (IN-PERSON) SST0101VS (VIRTUAL)

This Instructor-led Training Seminar focuses on the operation and diagnostic procedures of Supplemental Restraint Systems (SRS). Course content includes SRS sub-systems and components, vehicle applications, and interrelated systems. Additionally, this course highlights SRS safety procedures and protocol for proper vehicle repairs, safe operation of a vehicle post-collision, diagnostic procedures, service tips, and special tools. Various Original Equipment Manufacturers (OEMs) will be highlighted.

Languages: English

InShop Training

SRS AND SAFETY SYSTEMS — SST0101IS (IN-PERSON) SST0101VI (VIRTUAL)

This Instructor-led Training focuses on the operation and diagnostic procedures of Supplemental Restraint Systems (SRS). This course highlights SRS safety procedures and protocol for proper vehicle repairs, safe operation of a vehicle post-collision, diagnostic procedures, service tips, and special tools. Various Original Equipment Manufacturers (OEMs) will be highlighted.

Languages: English

Self Study Training

FLUIDS AND CHEMICALS SELF STUDY TRAINING — SFN0901SF

This self study course covers the functions and attributes of fluids and chemicals to be aware of, and their proper use. Course topics include fluids and chemicals for the engine, air conditioning, transmission, brakes, and other vehicle maintenance needs.

Languages: English

Web-Based Training

SERVICE INFORMATION OVERVIEW — SFN1201WB

This course covers the navigation of the Service Information (SI) website. It also covers search procedures, publication types, schematics, routine diagrams, and how to interpret schematic symbols. Upon completing this course, participants will be able to recall how to navigate the SI home page and service manuals and view schematics using the graphics viewers in SI.

Languages: English

LUBRICATION INSPECTION AND MAINTENANCE — S-FN00-22.02WBT

This course is an overview of the knowledge and skills involved in performing an oil change. It covers inspection of vehicle systems, oil change procedures, resetting the oil life monitor system, and selecting the correct grade and amount of oil to add to the engine.

Languages: English

FUNDAMENTALS OF HYDRAULIC THEORY AND OPERATION — S-FN00-26.01WBT

Hydraulics technology forms the core technology for many automotive systems, including brakes, steering, transmission, engine, and axles. Exploring and understanding hydraulic systems provides essential foundational knowledge of automotive systems. This WBT provides the general concepts, operation, and applicable components involved in the hydraulic systems of an automobile. Upon completion of this course, service technicians will be able to identify the ways that hydraulics are utilized in an automobile, recall Pascal's Law, identify hydraulics technology and fluid properties, and differentiate between the types of hydraulic systems, fluids, and components.

Languages: English

FUNDAMENTAL HYDRAULIC THEORY AND OPERATION — SFN1301WB

This course provides the general concepts, operation, and applicable components involved in the hydraulic systems of an automobile. Upon completion of this course, service technicians will be able to recall the origin, operation, and use of automotive hydraulic systems. The content covers the following topic areas: hydraulic theory; Pascal's Law and hydraulic variables; hydraulics and fluid properties; and hydraulic system types, components, and operation.

Languages: English

AUTOMOTIVE FLUIDS — SFN0101WB

This course is intended for service technicians and covers unique principles and practices for the use of automotive fluids across the product line.

Languages: English

InShop Training

ACDELCO TRAINING SITE OVERVIEW — BCC0101IS (IN-PERSON) BCC0101VI (VIRTUAL)

This instructor-led session provides shop owners, managers, technicians and other shop personnel with a familiarization of the ACDelco Learning Management System (LMS). An overview of the various features, benefits and functional characteristics of the system will be covered.

Languages: English

FUNDAMENTALS

TechTube Videos

PROPER TIRE INSPECTION — S-FN00-14.01VID

This video demonstrates the proper technique for inspecting a tire. The inspection starts with checking the tire inflation, then measuring the tread depth. Wear patterns from improper inflation, incorrect alignment or out of balance are discussed. Inspection of the sidewall for damage, tread for foreign objects and cracked rubber are shown.

Languages: English

CLUTCH STYLE LOCK CYLINDER — S-FN00-15.01VID

This video shows the normal operation of the clutch style door lock cylinder that everyone should be aware of and how to access on some models.

Languages: English

HOW TO INSTALL GDS2 — S-FN00-02.01VID

This short video will demonstrate how to install GDS2 after registering and subscribing to GMSI and TIS2WEB with ACDelco.

Languages: English

HOW TO INSTALL TECH2WIN — S-FN00-03.01VID

This short video will demonstrate how to install Tech2Win software on your computer.

Languages: English

HOW TO INSTALL THE MDI MANAGER — S-FN00-04.01VID

This short video will demonstrate how to install the MDI manager software on your computer.

Languages: English

HOW TO RECOVER YOUR MDI — S-FN00-05.01VID

This short video will demonstrate how to recover your MDI software.

Languages: English

HOW TO RENEW YOUR GDS2 LEASE — S-FN00-07.01VID

This short video will demonstrate how to renew your GDS2 lease agreement.

Languages: English

HOW TO SETUP MDI COMMUNICATION — S-FN00-08.01VID

This short video will demonstrate how to set up the MDI communication software on your computer with ACDelco.

Languages: English

HOW TO UPDATE TECH2WIN — S-FN00-10.01VID

This short video will demonstrate how to update the TECH2WIN software on your computer.

Languages: English

HOW TO UPDATE MDI FIRMWARE — S-FN00-11.01VID

This short video will demonstrate how to update your MDI firmware.

Languages: English

Web-Based Training

DATA BUS DIAGNOSTIC TOOL — S-DS11-15.02WBT

This course presents a description and introduction to the Data Bus Diagnostic Tool (DBDT). Topics include the DBDT's major characteristics: software installation, main screen (window), Detected State tab, Measured Voltage tab, Message Monitor tab, and Error Messages.

Languages: English/French

INTRODUCTION TO THE DIGITAL STORAGE OSCILLOSCOPE — S-DS11-16.01WBT

This course introduces the Digital Storage Oscilloscope (DSO) as an important tool in diagnosing vehicle concerns that may otherwise require significant time or disassembly for testing. Topics covered include: key components and basic setup; terminology, display outputs, waveform fundamentals and parameters; and how to interpret display data.

Languages: English

GLOBAL DIAGNOSTIC SYSTEM 2 (GDS2) — S-FN00-06.02WBT

This course consists of WBT and Hands-On components and is designed to provide the technician with the skills necessary to properly diagnose current and future vehicle platforms, using Global Diagnostic System 2 (GDS 2) and the Multiple Diagnostic Interface (MDI). Basic hardware requirements and networking concepts are addressed to aid technicians with installation, setup, update, and operation of both GDS 2 and MDI. Use of both tools during vehicle diagnostics including navigation, graphing, data display and DTC display are also covered.

Languages: English

GLOBAL DIAGNOSTIC SYSTEM 2 (GDS2): NAVIGATION DIAGNOSTIC SYSTEMS — SFN0502WB

This course describes the Global Diagnostic System 2 (GDS2). This includes how to access GDS2 via Techline Connect, navigate the system, and perform diagnostics on vehicles.

Languages: English

GLOBAL DIAGNOSTIC SYSTEM 2 (GDS2): STORED DATA DIAGNOSTIC SYSTEMS — SFN0602WB

This course covers aspects of the stored data functions and capabilities of Global Diagnostic System 2 (GDS2). Included in the course is how to navigate vehicle diagnostic screens and use the features of stored data.

Languages: English

MULTIPLE DIAGNOSTIC INTERFACE (MDI) FAMILIARIZATION — S-FN00-20.02WBT

This WBT course covers common characteristics of the MDI including MDI Setup Software, MDI / On Vehicle operation, and the Service Programming System Procedure. Upon completion of this course technicians will be able to identify common characteristics of the MDI, identify MDI Setup Software, identify MDI / On Vehicle operation, and identify the Service Programming System Procedure.

Languages: English/French

MULTIPLE DIAGNOSTIC INTERFACE (MDI) 2 — S-FN00-24.01WBT

This course presents a description of the Multiple Diagnostic Interface (MDI) 2. Topics include the hardware and the software associated with the MDI 2, as well as the relevant setup, operation, and recovery procedures.

Languages: English

NOISE, VIBRATION AND HARSHNESS 1 — SDS0201WB

Successfully diagnosing causes of Noise, Vibration, and Harshness (NVH) concerns identifies possible issues before they can escalate. NVH1 course covers vibration theory, as well as how to diagnose vibration concerns using the oscilloscope and noise concerns using the microphone.

Languages: English

NOISE, VIBRATION AND HARSHNESS 2 — SDS0301WB

NVH2 course covers vibration diagnostic techniques, such as road tests, and test equipment used in diagnosing vibration concerns.

Languages: English

DIAGNOSTIC SYSTEMS

Instructor-Led Training

SCOPES, CIRCUITS & SENSORS — S-DS11-04.01ILT

The ability to quickly and accurately solve complex electrical signal faults is a necessity for advanced diagnostic technicians. Using Oscilloscopes, technicians will learn to identify specific signal types and distinguish between good signals and specific failures. On-vehicle exercises will cover signals from sensor categories such as: Speed, Position, Proximity, Acceleration, Force, Flow, Temperature, Pressure, Gas and Concentration.

Languages: English

InShop Training

SERVICE PROGRAMMING AND TECHLINE CONNECT — SDS0201IS (IN-PERSON) SDS0201VI (VIRTUAL)

This Instructor-led Training will explore service programming on GM vehicles and accessing GM's Techline Connect programming service. Service programming specific hardware will be discussed, including: Tech 2, MDI 2, and supported third-party J2534 interface devices. Common service programming procedures will be covered including module setup and service programming actions. Additional topics covered include service programming resources, successful programming techniques and practices, and recovering from programming issues or errors.

Languages: English

TechTube Videos

PROGRAMMING KEY FOBS — S-DS11-01.01VID

This video will discuss some of the different methods to add, learn, or program a remote keyless entry system transmitter to a GM vehicle.

Languages: English

USING A DIGITAL MULTIMETER TO CHECK AMPERAGE — S-DS11-02.01VID

This video discusses what amperage is and the proper techniques for measuring amperage. The Fluke 87 digital multimeter is used to demonstrate the procedure. The video also demonstrates how to check the fuses on the meter and the proper settings for the meter. The video concludes by demonstrating the correct arrangement of leads to measure amperage or current flow on a live circuit.

Languages: English

TEST LIGHTS, IS THERE A DIFFERENCE? — S-DS11-03.01VID

This video will help you determine the proper test light to use for various electrical diagnostic tests and why this is important. OHMS law is utilized to calculate the working resistance and current draw of a test light.

Languages: English

HOW TO PERFORM A PARASITIC LOAD TEST — S-DS11-04.01VID

This video demonstrates the proper parasitic load test procedure to identify unwanted loads on the battery.

Languages: English

EXP-800 CAPACITANCE TESTING BATTERY - BATTERY TEST — S-DS11-05.01VID

This video demonstrates how to test a battery using the EXP 800 tester.

Languages: English

EXP-800 CAPACITANCE TESTING SYSTEM - SYSTEM TEST — S-DS11-06.01VID

This video demonstrates how to perform a system test (Battery, Starter, Alternator) using the EXP 800 tester.

Languages: English

FLUKE MIN / MAX FEATURE — S-DS11-07.01VID

This video demonstrates using the Min / Max feature of the Fluke 87 series digital multimeter for intermittent concerns, through an on car scenario and mock up circuits. Min / Max can be used while measuring voltage, amperage or resistance.

Languages: English

AGM BATTERY TESTING AND CHARGING S-DS11-08.01VID

This video describes the construction, testing and charging of Absorbed Glass Mat (AGM) batteries.

Languages: English

DATA BUS DIAGNOSTIC TOOL HELPS DIAGNOSE BATTERY DRAINS S-DS11-09.01VID

This video demonstrates the Data Bus Diagnostic Tool Message Monitor function to help diagnose battery drain concerns by monitoring the data line to see what modules wake up.

Languages: English

COLLISION

Web-Based Training

GM BODY STRUCTURAL FASTENING SYSTEMS 1 — S-SR04-01.01WBT

This WBT course will introduce body technicians to the fastening systems used for the Omega aluminum body. Topics include aluminum and steel component identification and location, the appropriate environment needed when doing aluminum repairs and an overview of the different fastening technology used on the aluminum body.

Languages: English

GM BODY STRUCTURAL FASTENING SYSTEMS 2 — S-SR04-02.01WBT

This WBT course will introduce body technicians to the fastening technology used with GM's aluminum body. This course provides more information on the aluminum body fastening systems and the repair.

Languages: English

MIG BRAZING THEORY OVERVIEW — S-SR04-03.01WBT

Metal Inert Gas (MIG) brazing is a lower temperature type of welding that deposits a melted seam of filler metal into and over the surface of a narrow gap to join two pieces of base metal. The filler metal melts at a lower temperature than the base metal; therefore, MIG brazing is used to create joints with less distortion and heat affected zones than conventional welding. This course presents an overview of the theory and practice of MIG brazing. Topics include the safety precautions, equipment, methodology, and applications.

Languages: English

RESISTANCE SPOT WELDING AND BONDING PROCEDURE OVERVIEW — S-SR04-05.01WBT

This course covers the Squeeze-Type Resistance Spot Welding process and weld bonding. Content focuses on the advantages of Squeeze-Type Resistance Spot Welding and weld bonding over traditional joining methods. Participants will review the equipment, personal and vehicle safety precautions, setup processes, as well as techniques and configurations of Squeeze-Type Resistance Spot Welding and weld bonding.

Languages: English

WATERLEAK AND WINDNOISE MANAGEMENT 1: THEORY AND CHARACTERISTICS — SCL0101WB

This WBT course covers waterleak and windnoise management theory, types of sealers and the characteristics and water management of hard moveable roofs, soft moveable roofs, and sunroofs.

Languages: English

WATERLEAK AND WINDNOISE MANAGEMENT 2: DIAGNOSIS — SCL0201WB

This WBT course covers waterleak and windnoise diagnosis using tests and visual inspections. It also covers glass and panel service using adjustment, sealing, and repair techniques.

Languages: English

WATERLEAK AND WINDNOISE MANAGEMENT 3: SERVICE TECHNIQUES — SCL0301WB

This WBT course covers waterleak and windnoise service techniques using panel and glass adjustment, and sealing methods. Where water damage has occurred, various repairs will be presented.

Languages: English

InShop Training

POST COLLISION - ADVANCED DRIVER ASSISTANCE SYSTEMS — WCL0101IS (IN-PERSON) WCL0101VI (VIRTUAL)

This training event will describe the types of components used in Advanced Driver Assistance Systems (ADAS) including sonar, cameras, radars, lasers, and antennas. There will be a brief overview of the types of ADAS that used these components. Special attention will be paid to service considerations following a collision.

Languages: English

PEDESTRIAN SAFETY SYSTEMS

SCL0201IS (IN-PERSON)
SCL0201VI (VIRTUAL)

This 1-hour InShop covers Front Pedestrian Braking (FPB) and Pedestrian Impact Detection System (PIDS). The topics discussed will include the need for pedestrian safety systems, description and operation of these systems, and replacement and repair procedures.

Languages: English

ALUMINUM WELDING AND REPAIR

W-SR04-01.01IST (IN PERSON)
W-SR04-01.01VI (VIRTUAL)

This training event will familiarize technicians with the types of aluminum repair and welding procedures. Specific topics will include alloys and treatment methods, as well as sectioning procedures, including chemical bonding and welding methods.

Languages: English

BOLTED BODY PANELS

W-NR03-02.01IST (IN PERSON)
W-NR03-02.01VI (VIRTUAL)

This training event will cover the installation and adjustment procedures for bolt on body panels. These bolt on panels include front and rear doors, hoods, liftgates, fenders and fascias. Proper installation and adjustment results in uniform gaps; ease of opening and closing, eliminates noise and improves customer satisfaction.

Languages: English

POST COLLISION - BRAKE INSPECTION AND REPAIR

W-EM05-10.01IST (IN PERSON)
W-EM05-10.01VI (VIRTUAL)

This training event will cover the inspections needed post collision and the procedures for effective repairs on braking systems. Topics include visual inspections, brake pipe and hose replacement, caliper inspection, brake fluid and bleeding, ABS inspection and repairs.

Languages: English

POST COLLISION - POWER STEERING INSPECTION AND REPAIR

W-EM05-11.01IST (IN PERSON)
W-EM05-11.01VI (VIRTUAL)

This training event will cover the inspections needed post collision and the procedures for effective repairs on power steering systems. Topics include visual inspections, power steering pump servicing, rack inspections and servicing, electronic/electric power steering servicing, power steering fluid flushing and bleeding, steering column inspection.

Languages: English

POST COLLISION - TIRES AND WHEELS

W-EM05-12.01IST (IN PERSON)
W-EM05-12.01VI (VIRTUAL)

This training event will cover the inspections needed post collision and the procedures for effective repairs on tire / wheel assemblies. Topics include visual inspections, tire and wheel servicing, balancing, wheel reconditioning, TPMS inspections and servicing.

Languages: English

STRUCTURAL STEEL WELDING AND REPAIR

W-SR04-02.01IST (IN PERSON)
W-SR04-02.01VI (VIRTUAL)

This training event will cover repair techniques for various types of structural steel, including mild steel, High Strength Steel (HSS), laminated, Press Hardened Steel (PHS), High Strength Low Alloy (HSLA) and Advanced High Strength Steel (AHSS).

Languages: English

SUPPLEMENTAL RESTRAINTS - SERVICE AND REPAIR

W-ST10-01.01IST (IN PERSON)
ST10-01.01VI (VIRTUAL)

This training event will cover the servicing of supplemental restraint systems. Topics include replacement of the SDM, inflators, passenger presence sensor, SIR coil, seat belt retractors and wire repair strategy.

Languages: English

COLLISION

SUPPLEMENTAL RESTRAINTS - SERVICE AND REPAIR

W-ST10-01.01IST (IN PERSON)
W-ST10-01.01VI (VIRTUAL)

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Languages: English

Clinics

ADVANCED DRIVER ASSISTANCE SYSTEMS

SEL0401SM (IN PERSON)
SEL0401VS (VIRTUAL)

This training event focuses on Advanced Driver Assistance Systems installed on various vehicles. Systems including; Forward Collision Warning, Automatic Emergency Braking, Lane Keep Assist, Lane Departure Warning, Adaptive Cruise Control, Park Assist and others will be covered in detail. Various Original Equipment Manufacturers (OEMs) will be highlighted, including an overview of the operation, diagnosis, and servicing of the systems and their components.

Languages: English

BODY ELECTRICAL SYSTEMS - COLLISION SERVICE AND REPAIR

W-EM05-04.01SEM (IN PERSON)
W-EM05-04.01VS (VIRTUAL)

This training event will cover procedures to be followed while making wiring repairs and for safe operation of vehicle post-accident. In addition, the following topics will be covered: wire harness repairs, analyzing schematics, electrical ground repairs, High Intensity Discharge (HID) and dynamic headlight setup.

Languages: English

CHASSIS SYSTEMS - POST COLLISION REPAIR

W-EM05-06.01SEM (IN PERSON)
W-EM05-06.01VS (VIRTUAL)

This training event will cover procedures to be followed while making chassis system repairs for safe operation of vehicle post-accident. In addition, the following topics will be covered: Brake System inspection and repair, Power steering system inspection and repair, wheel alignment, and tire and wheel inspection and repair, including TPMS and NVH tips.

Languages: English

GM NON-STRUCTURAL COLLISION REPAIR

W-NR03-01.01SEM (IN PERSON)
W-NR03-01.01VS (VIRTUAL)

This training event will cover an overview of replacing exterior non-structural body components, including hinged components, bonded and welded components (such as rear quarter panels). Also covered is proper bolting, welding and bonding (to ensure proper mounting of exterior body components), alignment and measuring to meet pre-accident condition, anti-corrosion information is discussed to help eliminate rust or failure to a replacement part or components after the repair.

Languages: English

GM STRUCTURAL COLLISION REPAIR

W-SR04-01.01SEM (IN PERSON)
W-SR04-01.01VS (VIRTUAL)

This training event will cover repairing and replacing structural components on GM vehicles. The training will touch on three important areas to repairing and replacing structural components on a vehicle, included are measuring, cutting, and welding. Each area relates to the performance of the repair as it will meet specific tolerances and factory guidelines. It is crucial during the repair to validate during these three areas to meet specifications and customer satisfaction. This training event will discuss the 2014 Chevrolet Corvette Stingray and aluminum repair procedures for front and rear rails.

Languages: English

HVAC – R-1234YF - SERVICE AND REPAIR AFTER COLLISION

W-EM05-01.01SEM (IN PERSON)
W-EM05-01.01VS (VIRTUAL)

This training event will cover recent advances in automotive Heating, Ventilation and Air Conditioning. Topics include: The new (HFO) R-1234yf refrigerant, Tools and Equipment for servicing (HFO) R-1234yf systems, Differences in vehicle components, Proper service and diagnostic procedures for R-134a and (HFO) R-1234yf. Also covered are HVAC component replacement and best practices.

Languages: English

HYBRID ELECTRIC VEHICLES - REPAIR IT SAFELY AFTER COLLISION

W-EM05-03.01SEM (IN PERSON)
W-EM05-03.01VS (VIRTUAL)

This training event will cover the safe inspection and service of Electric and Hybrid Electric Vehicles. Topics include: an overview of the alternative propulsion systems found in these vehicles; the required safety equipment and procedures that must be followed when inspecting and servicing these vehicles; the procedure for removing HV system components safely in the course of collision repairs. Also discussed will be how to diagnose two common conditions that may be encountered post collision repairs.

Languages: English

RESTRAINT SYSTEMS - REPAIR IT SAFELY AFTER COLLISION

W-EM05-02.01SEM (IN PERSON)
W-EM05-02.01VS (VIRTUAL)

This training event will cover the safety procedures to be followed while making repairs for safe operation of vehicle post-accident. In addition, the following topics will be covered: Supplemental Restraint Systems (SRS) components, SIR Disabling, Repairs and Inspection and Scan tool Diagnosis. Also discussed will be SRS component replacement and restoring the system to pre-accident readiness.

Languages: English

TechTube Videos

MIG STEEL SETUP

S-NR03-01.01VID

This video will discuss machine setup for MIG welding of steel and address - gas flow, wire speed, and voltage settings.

Languages: English

MIG STEEL WELD

S-NR03-02.01VID

This video will demonstrate proper welds/ vertical and overhead -technique, travel speed, fine adjustments for vertical versus overhead welding.

Languages: English

MIG STEEL DESTRUCTIVE TESTING

S-NR03-03.01VID

This video will provide information on performing proper visual inspection, and destructive testing -evaluating welds for pass fail, destructive test looking for tear out of metal.

Languages: English

MIG ALUMINUM SETUP

S-SR04-01.01VID

This video will discuss machine setup for MIG welding of aluminum and address - gas flow, wire speed, and voltage settings.

Languages: English

MIG ALUMINUM WELD

S-SR04-02.01VID

This video will demonstrate making proper welds/ vertical and overhead -technique, travel speed, fine adjustments for vertical versus overhead welding.

Languages: English

MIG ALUMINUM DESTRUCTIVE TESTING

S-SR04-03.01VID

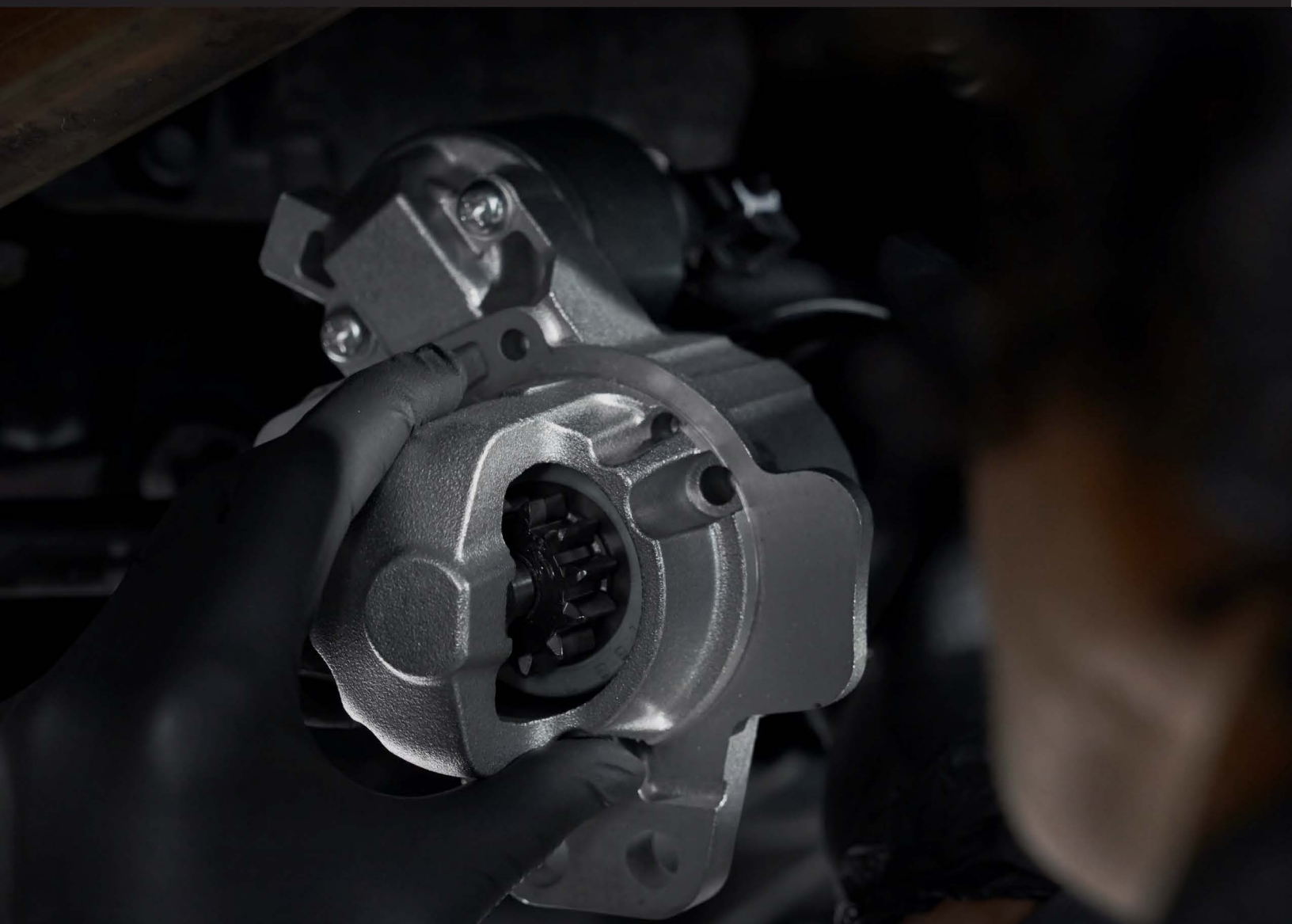
This video will provide information on performing proper visual inspection, and destructive testing -evaluating welds for pass fail, destructive test looking for tear out of metal.

Languages: English

NOTES

NOTES

GENUINE PARTS | ACDelco



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